Administrative County of Middlesex.

ANNUAL REPORT

OF THE

COUNTY MEDICAL OFFICER OF HEALTH

FOR THE

YEAR 1925.

LONDON:
HARRISON AND SONS, LTD., ST. MARTIN'S LANE, W.C. 2,
Printers in Ordinary to His Majesty.

1926.

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[No. 699] (19924)T A

TO THE CHAIRMAN AND MEMBERS OF THE COUNTY COUNCIL OF MIDDLESEX.

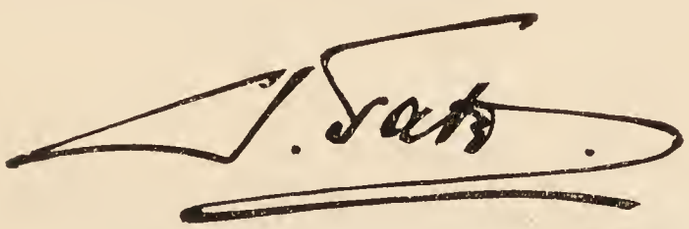
PUBLIC HEALTH DEPARTMENT,
GUILDHALL,
WESTMINSTER, S.W. 1,
June, 1926.

SIR, MY LORD, LADIES AND GENTLEMEN,

I have the honour to submit my Annual Report on the Public Health of the County for the year 1925. In accordance with instructions issued by the Ministry of Health in 1921, at intervals of five years the annual reports of Medical Officers of Health are to be comprehensive in character, and include a survey of the changes and progress in matters relating to the public health which have taken place during the preceding five years. The contents and arrangement of annual reports of Medical Officers of Health are dealt with in the Ministry's Circular 648, issued in December last, wherein it is laid down that Survey Reports for 1925 should contain, as a minimum, certain specified information set out in an appendix. This year's Report is the first Survey Report for the County to be issued under the new instructions, and attempt has been made to comply with the very detailed requirements of the Ministry, but, inasmuch as many subjects referred to in the appendix are matters under the administration of local sanitary authorities, in the case of a county complete compliance is not practicable.

In addition to reporting upon the vital statistics of the County and on the several public health activities of the County Council, I have thought it advantageous to include in the Survey Report a summary of certain important sanitary provisions for which local sanitary authorities are responsible.

I have the honour to be,
Your obedient servant,



County Medical Officer of Health.

(19924)T A 2

Staff.

WHOLE-TIME OFFICERS.

County Medical Officer of Health and School Medical Officer.

J. Tate, M.R.C.S., L.R.C.P., D.P.H.

Deputy County Medical Officer of Health and Deputy School Medical Officer.

*H. M. C. Macaulay, M.D., B.S., B.Sc., D.P.H.

Tuberculosis Medical Officers.

F. R. B. Atkinson, M.D., C.M.
O. Bruce, M.R.C.S., L.R.C.P.
S. Trevor Davies, M.R.C.S., L.R.C.P.
J. R. B. Dobson, M.B., B.S., B.Sc.
H. Evans, M.D., Ch.B., D.P.H.
E. E. Norton, M.D., D.P.H.

Assistant Medical Officers.

(*Maternity and Child Welfare and School Medical Inspection and Treatment.*)

Mrs. A. M. Burn, M.B., Ch.B., D.P.H.
R. N. Daniel, M.R.C.S., L.R.C.P.
W. R. H. Heddy, M.R.C.S., L.R.C.P., D.P.H., Barrister-at-Law.
H. W. Moir, M.B., Ch.B., D.P.H.
Lieut-Col. H. L. W. Norrington, D.S.O., M.R.C.S., L.R.C.P.
Miss R. E. Proctor, M.A., M.B., Ch.B., D.P.H.
Mrs. R. H. Shelley, M.B., B.S.
Miss G. Wilson, M.A., M.B., Ch.B., D.P.H. (Appointed in 1925, commenced duty January, 1926).

Senior Dental Officer.

(*Maternity and Child Welfare, Harefield Sanatorium, School Dental Treatment.*)

S. J. Smith, L.D.S.

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* Dr. Macaulay commenced duty on 7th August, 1925; he succeeded Dr. W. M. Ash, who resigned his position in June, 1925, on being appointed County Medical Officer of Health for Derbyshire.

Assistant Dental Officers.

(*Maternity and Child Welfare and School Dental Treatment.*)

Miss F. M. Andrews, L.D.S.
R. E. Cook, L.D.S.
R. V. Kingham, L.D.S.
Mrs. C. S. Leiper, L.D.S.

Inspector of Midwives and Superintendent of Health Visitors.

Miss A. A. I. Pollard.

Inspector of Midwives.

Miss C. A. M. Coleman.

Tuberculosis Dispensary Nurses	12
Health Visitors and School Nurses ...	21
Dental Nurses	5
Midwives	3

HAREFIELD SANATORIUM.

Resident Medical Superintendent.

J. R. McGregor, M.B., Ch.B., D.P.H.

Resident Deputy Medical Superintendent.

R. J. Allison, M.R.C.S., L.R.C.P.

Resident Assistant Medical Officers.

M. B. Laughton, M.B., Ch.B., D.P.H.
C. M. Brown, M.B., Ch.B.*

Matron.

Miss A. Ferguson.

PART-TIME OFFICERS.

Physician in charge of the Central Ante-natal Clinic.

J. S. Fairbairn, M.A., F.R.C.S., F.R.C.P.

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* Dr. Brown commenced duty on 20th June, 1925; he succeeded Dr. H. Franklyn, who resigned his position in May, 1925.

Ophthalmic Surgeons.

(*Maternity and Child Welfare and School Medical Inspection and Treatment.*)

Mrs. S. G. Banham, M.B., B.S.
F. A. C. Tyrrell, B.A., M.B., B.Ch., F.R.C.S.

Assistant Medical Officers.

(*Maternity and Child Welfare.*)

L. W. Hignett, M.B., C.M., D.P.H.
F. A. Spreat, F.R.C.S., D.P.H.

COUNTY COUNCIL TUBERCULOSIS HOSPITAL, ISLEWORTH.

Resident Medical Officer.

J. B. Cook, M.D., Ch.B., D.P.H.

Administrative County of Middlesex.

ANNUAL REPORT of the County Medical Officer for the Year 1925.

General and Vital Statistics.

Area.—The Administrative County of Middlesex contains an area, including inland water, of 148,692 acres.

It is bounded on the north by the County of Hertfordshire, on the north-east by the County of Essex, on the south-east by the County of London, and on the west by the County of Buckinghamshire, whilst its southern boundary is formed by the River Thames, which separates it from the County of Surrey.

Broadly speaking, Middlesex may be considered as consisting of two zones, an inner zone of an intensely urban character adjoining London, and comprising the north-eastern and eastern portions of the County, and an outer zone, more rural in nature, containing districts, in the north-western, western and south-western parts of the area.

For the purposes of local government, the County is divided into 37 separate sanitary districts. Three of these are Municipal Boroughs, thirty are Urban Districts and four are Rural Districts. The Rural Districts have a total area of 48,023 acres, but much of this area is in process of active urbanisation. The rapid growth of districts in the neighbourhood of London is evidenced in a marked degree in the County of Middlesex, and the continued extension and improvement of transport facilities have resulted in the establishment of numerous centres of population in the, hitherto, rural portion of the County.

Perhaps, from the standpoint of the County, the most important feature which has marked the passage of the past five years has been the holding of an enquiry by a Royal Commission into the question, *inter alia*, of the desirability, or otherwise, of the abolition of the Middlesex County Council

and the creation of a new Central Authority, having administrative powers over a wide area, comprising the Counties of London and Middlesex, the County Boroughs of East and West Ham and Croydon, certain portions of the Counties of Hertfordshire, Essex, Kent and Surrey, and the City of London.

The report of the Royal Commission, issued in 1923, definitely negatived the proposal for the formation of this large central authority, and thus the identity and autonomy of the County of Middlesex were preserved.

At the same time the close attention which the County Council devoted to the subject of the existing state of public health administration in the County, in connection with the preparation of evidence to be tendered to the Commission, resulted in the conclusion being reached that the suitable combination of smaller sanitary districts, so as to create areas of such a size as to justify the appointment of whole-time officers, should lead to an increase in efficiency.

In June, 1923, stimulated by the findings of the Royal Commission, further progress was made by the appointment of a Special Committee of the County Council to consider what changes, if any, were desirable for the better governance of the County.

This Committee is still in existence, and continuing its operations. One of the first activities of the Committee was to ascertain from the district councils whether, in their opinion, amalgamation of any local government areas was desirable, with a view to offering the assistance of the County Council towards arrival at an agreed scheme of amalgamation, if this were in accordance with local wishes. Conferences between local councils and the County Committee have been held, and the whole subject of amalgamation still is under active consideration in various parts of the County.

In 1924, a local inquiry was held by the County Council into a proposal to create a large urban district centred around the present Urban District of Uxbridge. After careful and prolonged hearing the County Council made an order for the suggested amalgamation, but, owing to local opposition, the Ministry of Health was unable to confirm

the order. A proposal for the amalgamation of the Urban Districts of Brentford and Chiswick was the subject of a further inquiry in 1925, and since the close of the year an order to this effect has been made by the County Council. In 1925 the Borough Council of Ealing sought to include within its area the Urban Districts of Greenford and Hanwell with the consent of the Councils of these districts. No opposition was offered by the County Council, and Parliament has been asked to grant the required powers.

From the above brief statement it is apparent that a gradual reduction in the number of separate local sanitary authorities in Middlesex is being effected, and so long as the resultant areas are not excessive in population or acreage this policy should effect increased efficiency and economy in the administration of public health.

Population.—For the purposes of comparing the vital statistics of one year with those of another it is necessary to have as reliable information as is possible of the population in each year. Every 10 years enumeration of the population is recorded by the census, but in the intervening period recourse necessarily must be had to estimates of the number of persons resident in the County.

These estimates are calculated by the Registrar-General, and are supplied to each district. The figures provided represent the estimated population at the middle of the year and do not include patients resident in two large mental hospitals belonging to London, but within the boundaries of Middlesex, viz., Colney Hatch and Hanwell institutes ; whilst Middlesex residents who are actually in Springfield Mental Hospital, Wandsworth, and Napsbury Mental Hospital, Hertfordshire, are included. The figures used, therefore, represent the *statistical* population of the County, and not the actual or *gross* population. In addition to the estimated total population of each district, an estimate of the civilian population is furnished by the Registrar-General. This differs from the total population in the cases of the six districts in which military and air force establishments are located, viz., the Urban Districts of Feltham, Hendon, Heston and Isleworth, Ruislip-Northwood, and Uxbridge, and the Rural District of Uxbridge.

Reference to the table on pages 5 *et seq.* will show that there is an estimated service population of 3,480 in the County, and, as all deaths which may occur amongst these individuals are credited to the districts in which the home addresses of the soldiers are situated, the importance of the estimate of the civilian population is evident.

In the following table is set out detailed information as to the enumerated population of each district recorded in the last two censuses, together with the estimated populations on the 30th June, 1925. The total population of the County is 13,420 in excess of that of 1924, whilst the "civilian" estimate shows an increase of 13,630 on the figure for the preceding year.

Population.

	Census 1911.	Census 1921.	Population, 1925, Estimated by Registrar-General.	
			Total.	Civilian.
Urban.				
Acton (*Borough*)	57,497	61,299	63,110	63,110
Brentford	16,571	17,032	17,680	17,680
Chiswick	38,697	40,938	40,460	40,460
Ealing (*Borough*)	61,222	67,755	68,410	68,410
Edmonton	64,797	66,807	71,210	71,210
Enfield	56,338	60,738	63,740	63,740
Feltham	5,135	6,326	7,216	6,946
Finchley	39,419	46,716	48,500	48,500
Friern Barnet	14,924	17,375	18,540	18,540
Greenford	1,064	1,461	1,610	1,610
Hampton	9,220	10,675	10,920	10,920
Hampton Wick	2,417	3,265	3,041	3,041
Hanwell	19,129	20,481	20,980	20,980
Harrow	17,074	19,469	20,910	20,910

	Census 1911.	Census 1921.	Population, 1925, Estimated by Registrar-General.	
			Total.	Civilian.
Urban—continued.				
Hayes	4,261	6,303	8,859	8,859
Hendon	38,806	56,013	59,330	59,150
Heston & Isleworth	43,313	46,664	48,620	48,350
Hornsey (*Borough*)	84,592	87,659	87,210	87,210
Kingsbury	821	1,856	2,303	2,303
Ruislip-Northwood	6,217	9,112	10,540	10,260
Southall-Norwood	26,323	30,287	32,220	32,220
Southgate	33,612	39,122	39,860	39,860
Staines	6,755	7,326	7,532	7,532
Sunbury	4,607	5,350	5,910	5,910
Teddington	17,847	21,213	21,860	21,860
Tottenham	137,418	146,711	153,600	153,600
Twickenham	29,367	34,790	35,160	35,160
Uxbridge	10,374	12,919	14,180	11,980
Wealdstone	11,923	13,433	13,970	13,970

Wembley	10,696	16,187	20,360	20,360
Willesden	154,214	165,674	168,900	168,900
Wood Green	49,369	50,707	51,960	51,960
Yiewsley	4,315	4,843	5,599	5,599
Rural.				
Hendon	14,160	17,656	19,510	19,510
South Mimms	2,805	3,134	3,470	3,470
Staines	21,926	25,063	26,550	26,550
Uxbridge	9,240	10,643	12,600	12,320
The County	1,126,465	1,253,002	1,306,430	1,302,950

Births and Birth-rates.—The total number of births occurring during 1925 and belonging to Middlesex was 21,533. The birth-rate for the County therefore was 16·5 per 1,000 of the population, as compared with 17·0 per 1,000 in the previous year. The number of illegitimate infants was 780, or a reduction of 4 on the total of the previous year, whilst the number of legitimate births, viz., 20,753, shows a reduction of 492. As is usual, the number of male infants born was higher than that of females, the figures being 11,069 and 10,464 respectively.

The steady decline in the birth-rate, which has been in evidence for many years past, continues, and, with the exception of the years 1917 and 1918, when the abnormal conditions prevailing during the Great War led to a marked reduction in the number of infants born, the birth-rate for 1925 is the lowest on record. The systematic character of the decline is evidenced by the following :—

Average birth-rate in the County for 5 years—	
1901–5	28·2
1906–10	26·8
1911–15	23·1
1916–20	18·3*
1920–25	18·1
Birth-rate in the County for 1925 ...	16·5

That the decline is general throughout the Kingdom is shown by the following table, which affords information of the rates in Middlesex, London, the Great Towns, and England and Wales ; it will be observed that the birth-rate in Middlesex remains below that of the other areas recorded.

Year.	The County.		London.	Great Towns.	England and Wales.
	Births.	Rate per 1,000 living.	Rate per 1,000 living.	Rate per 1,000 living.	Rate per 1,000 living.
1921	25,191	20·0	22·3	23·3	22·4
1922	23,775	18·7	21·0	21·4	20·6
1923	23,172	18·1	20·2	20·4	19·7
1924	21,993	17·0	18·7	19·4	18·8
1925	21,533	16·5	18·0	18·8	18·3

* Includes war period.

Particulars of the number of births and the birth-rate in each sanitary district in the County are set out in the table which follows. The birth-rates recorded in 1924 are inserted in italics for the purpose of comparison. It will be observed that amongst the districts in which 500 or more births occurred Edmonton again shows the highest rate, viz., 19·5, and the Borough of Hornsey the lowest, viz., 13·9. It is interesting to note that in 8 districts an actual increase in the birth-rate took place; only 4 of these however, viz., the Borough of Hornsey and the Urban Districts of Edmonton, Southall-Norwood and Twickenham, were districts sufficiently large to bring them into the group recording a total of 500 or more births each.

Births and Birth-Rates in each District, 1925.

District.	Nett number.	Rate per 1,000 living.	District.	Nett number.	Rate per 1,000 living.
Hayes	209	23·6 (*26·0*)	Greenford	27	16·8 (*14·8*)
Yiewsley	128	22·9 (*25·7*)	Acton (Borough) ...	1,047	16·6 (*18·4*)
Sunbury	129	21·8 (*21·8*)	Enfield	1,051	16·5 (*17·6*)
Kingsbury	50	21·7 (*26·8*)	Southall–Norwood ...	514	16·0 (*15·6*)
Wembley	428	21·0 (*18·4*)	Hendon (Rural)... ...	313	16·0 (*15·5*)
Feltham	147	20·4 (*22·0*)	Hendon (Urban) ...	922	15·5 (*16·2*)
Brentford	344	19·5 (*20·2*)	Chiswick	620	15·3 (*17·6*)
Edmonton	1,391	19·5 (*19·3*)	Hanwell	319	15·2 (*16·9*)
Staines (Rural)	497	18·7 (*19·3*)	Uxbridge (Urban) ...	215	15·2 (*15·6*)
Uxbridge (Rural) ...	236	18·7 (*21·6*)	Finchley	724	14·9 (*15·9*)
Wealdstone	254	18·2 (*18·5*)	Friern Barnet	272	14·7 (*15·4*)
Tottenham	2,756	17·9 (*18·6*)	Harrow	303	14·5 (*14·8*)
Teddington...	389	17·8 (*18·2*)	South Mimms (Rural) ...	50	14·4 (*13·7*)
Twickenham	613	17·4 (*16·7*)	Wood Green	740	14·2 (*14·7*)
Heston and Isleworth ...	848	17·4 (*17·7*)	Ealing (Borough) ...	961	14·0 (*14·3*)
Staines (Urban) ...	128	17·0 (*20·7*)	Hornsey (Borough) ...	1,214	13·9 (*13·6*)
Willesden	2,867	17·0 (*17·2*)	Hampton	148	13·6 (*13·7*)
Ruislip–Northwood ...	178	16·9 (*18·9*)	Hampton Wick. ...	40	13·2 (*13·3*)
			Southgate	461	11·6 (*12·1*)

Figures in brackets indicate Birth-rates for 1924.

Deaths and Death-Rates (All Causes).—During the year 13,192 deaths occurred amongst residents belonging to the County. This is equivalent to a death-rate of 10·1 per 1,000. It is rather lower than the rate for 1924, which was 10·4, and compares favourably with other death-rates ; thus the death-rate in London was 11·7, in the Great Towns 12·2, and in England and Wales 12·2 per 1,000.

A table giving information as to the death-rates during the past 5 years in the County, and in the other areas mentioned above, is given below, and reference to this will show that during the whole period Middlesex has maintained its favourable position in comparison with the other areas. In view of the opposite position which the County holds in the matter of birth-rates, it is fortunate that this is so.

Year.	The County.		London.	Great Towns.	England and Wales.
	Deaths.	Rate per 1,000 living.	Rate per 1,000 living.	Rate per 1,000 living.	Rate per 1,000 living.
1921	12,763	10·1	12·4	12·3	12·1
1922	13,477	10·6	13·4	13·0	12·9
1923	12,136	9·5	11·2	11·6	11·6
1924	13,348	10·4	12·1	12·3	12·2
1925	13,192	10·1	11·7	12·2	12·2

The number of deaths and the nett death-rate for each sanitary district in the County are as follows :—

DEATHS AND DEATH-RATES IN EACH DISTRICT, 1925.

	Under 1 year of age.		At all ages.	
	No.	Rate per 1,000 births.	No.	Rate per 1,000 living.
Urban—				
Acton (*Borough*)	80	76	669	10·6
Brentford	14	41	198	11·2
Chiswick	54	87	512	12·7
Ealing (*Borough*)	54	56	685	10·0
Edmonton	78	56	676	9·5
Enfield	54	51	635	10·0
Feltham	10	68	76	10·9
Finchley	43	59	519	10·7
Friern Barnet	21	77	161	8·7
Greenford	3	111	16	9·9
Hampton	12	81	126	11·5
Hampton Wick	2	50	40	13·2
Hanwell	19	60	182	8·7
Harrow	9	30	196	9·4
Hayes	13	62	68	7·7
Hendon	36	39	551	9·3
Heston & Isleworth ...	62	73	533	11·0
Hornsey (*Borough*) ...	53	44	956	11·0
Kingsbury	4	80	24	10·4
Ruislip-Northwood ...	4	22	78	7·6
Southall-Norwood	26	51	245	7·6
Southgate	17	37	393	9·9
Staines	4	31	74	9·8
Sunbury	11	85	47	8·0
Teddington	19	49	264	12·1
Tottenham	149	54	1,608	10·5
Twickenham	43	70	381	10·8
Uxbridge	13	60	117	9·8
Wealdstone	9	35	126	9·0
Wembley	25	58	187	9·2
Willesden	168	59	1,691	10·0
Wood Green	35	47	507	9·8
Yiewsley	11	86	53	9·5

	Under 1 year of age.		At all ages.	
	No.	Rate per 1,000 births.	No.	Rate per 1,000 living.
Rural.				
Hendon	13	42	164	8·4
South Mimms	—	—	33	9·5
Staines	37	74	278	10·5
Uxbridge	15	64	123	10·0
The County	1,220	57	13,192	10·1

The various causes to which the deaths in the County are attributed are shown on page 14, and examination of this table indicates that heart disease, cancer, tuberculosis (all forms), pneumonia (all forms), bronchitis, and cerebral hæmorrhage, &c., remain as in the preceding years the principal causes of death. Of these specified diseases, mortality due to heart disease shows the most pronounced increase; increases also are recorded in the case of cancer and cerebral hæmorrhage, &c. On the other hand a decreased mortality is evident in the case of bronchitis, pneumonia and tuberculosis. The death-rates from these diseases during the past five years are as follows :—

	1921.	1922.	1923.	1924.	1925.
Heart disease	1·15	1·40	1·33	1·46	1·64
Cancer	1·19	1·22	1·27	1·31	1·39
Tuberculosis (all forms)	0·94	0·90	0·88	0·92	0·84
Pneumonia (all forms)	0·72	0·83	0·65	0·78	0·68
Bronchitis	0·73	0·80	0·61	0·80	0·64
Cerebral hæmorrhage, &c.	0·56	0·57	0·58	0·54	0·59

Detailed information as to the different diseases which contributed towards the total number of deaths and the age groups in which these deaths occurred is given in the following table :—

CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF MIDDLESEX, 1925.

Causes of Death. (1)	All Ages. (2)	0— (3)	1— (4)	2— (5)	5— (6)	15— (7)	25— (8)	45— (9)	65— (10)	75— (11)
1. Enteric Fever	10	—	—	—	2	—	7	1	—	—
2. Smallpox	—	—	—	—	—	—	—	—	—	—
3. Measles	27	4	10	7	6	—	—	—	—	—
4. Scarlet Fever	12	—	2	6	2	1	1	—	—	—
5. Whooping Cough ...	135	66	38	25	3	1	—	1	1	—
6. Diphtheria...	108	—	7	29	69	1	1	1	—	—
7. Influenza	329	9	7	7	7	18	56	87	63	75
8. Encephalitis Lethargica ...	40	3	3	2	4	5	8	12	3	—
9. Meningococcal Meningitis	12	3	2	3	2	2	—	—	—	—
10. Tuberculosis of Respiratory System	922	1	3	2	26	201	413	244	28	4

11. Other Tuberculous Diseases	175	16	10	33	28	34	34	13	5	2
12. Cancer, Malignant Disease	1,814	—	1	7	8	12	155	832	505	294
13. Rheumatic Fever ...	47	—	—	—	15	10	7	10	4	1
14. Diabetes	130	—	—	1	2	5	16	52	33	21
15. Cerebral Hæmorrhage, &c.	772	—	—	—	1	1	21	214	245	290
16. Heart Disease	2,139	—	1	—	19	46	145	574	618	736
17. Arterio-sclerosis	518	—	—	—	—	—	2	105	159	252
18. Bronchitis	834	54	11	5	2	—	24	148	219	371
19. Pneumonia (all forms) ...	880	167	64	39	25	30	110	181	124	140
20. Other Respiratory Diseases	161	6	2	4	5	4	18	42	40	40
21. Ulcer of Stomach or Duodenum	115	—	—	—	—	3	20	62	22	8
22. Diarrhœa, &c.	171	108	11	4	4	2	7	12	7	16
23. Appendicitis and Typhlitis	103	1	1	4	22	19	26	21	8	1
24. Cirrhosis of Liver ...	64	—	—	—	—	1	6	38	16	3
25. Acute and Chronic Nephritis	297	—	—	—	5	15	36	116	74	51
26. Puerperal Sepsis	25	—	—	—	—	4	21	—	—	—
27. Other Accidents and Diseases of Pregnancy and Parturition	33	—	—	—	—	3	29	1	—	—

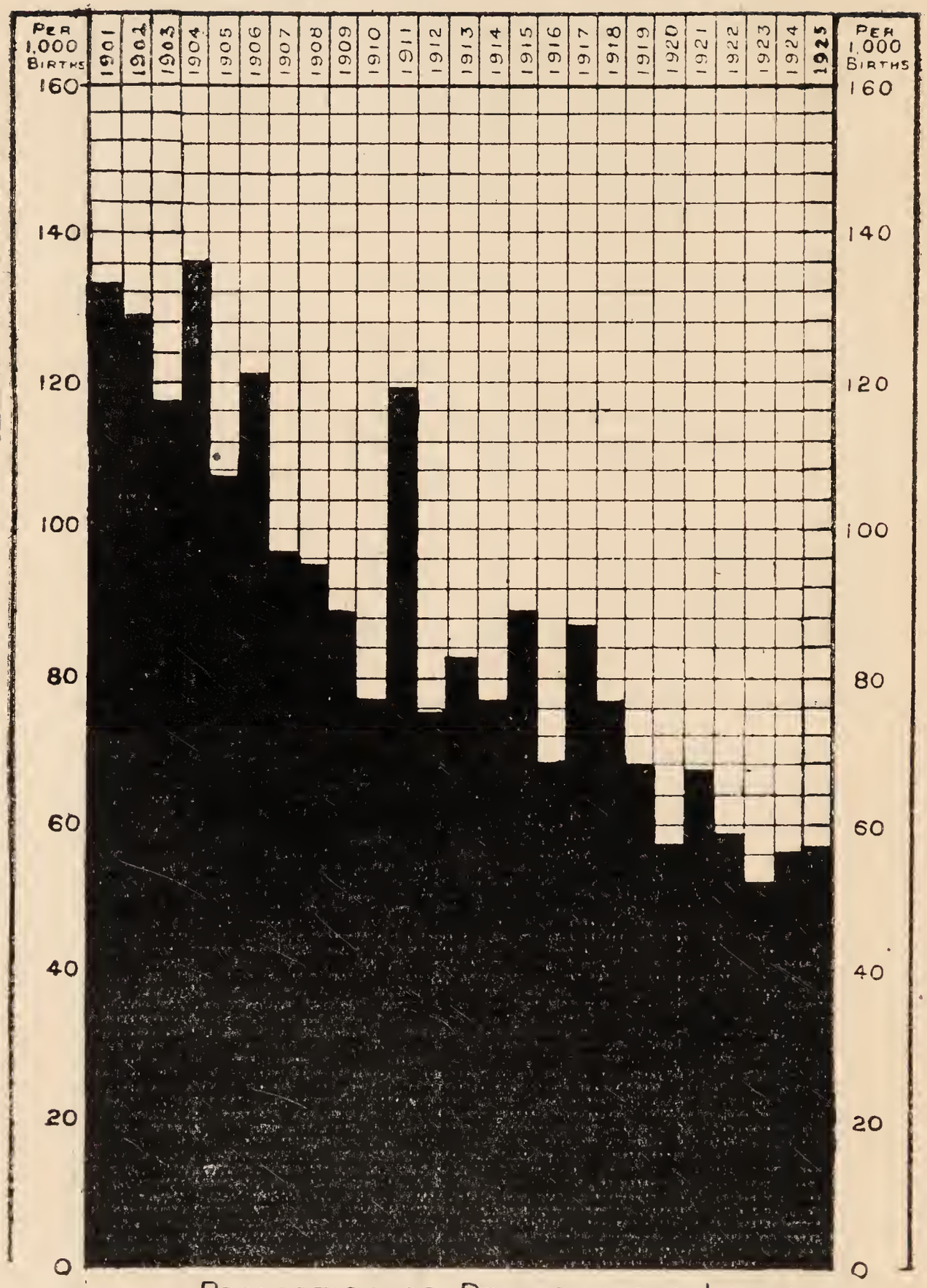
Causes of Death.	All Ages.	0—	1—	2—	5—	15—	25—	45—	65—	75—
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
28. Congenital Debility and Malformation, Premature Birth	564	558	2	—	2	1	—	1	—	
29. Suicide	153	—	—	—	—	13	47	70	16	7
30. Other Deaths from Violence	352	30	8	17	43	42	57	73	38	44
31. Other Defined Diseases ...	2,241	191	33	53	72	77	217	463	384	751
32. Causes ill-defined or unknown	9	3	—	—	1	—	2	2	1	—
All Causes	13,192	1,220	216	248	375	551	1,486	3,376	2,613	3,107

Infantile Mortality.—During 1925 there occurred in the County area a total of 1,220 deaths amongst infants who had not attained the age of one year. This is a slightly lower number than in 1924, when the total was 1,227, but owing to the reduction in the number of births the infantile mortality rate in 1925 is 1 per 1,000 births higher than in the previous year. At the same time the County compares very favourably with other areas, as is shown in the following table :—

Year.	The County.			London.	Great Towns.	England and Wales.
	Births.	Deaths under 1 year.	Rate per 1,000 births.	Rate per 1,000 births.	Rate per 1,000 births.	Rate per 1,000 births.
1921	25,191	1,681	67	80	87	83
1922	23,775	1,387	58	74	82	77
1923	23,172	1,198	52	60	72	69
1924	21,993	1,227	56	69	80	75
1925	21,533	1,220	57	67	79	75

The chief causes to which the infantile deaths are attributed (*see* table on page 14) are congenital debility, malformations and premature birth (558), pneumonia (all forms) and bronchitis (221), and diarrhœa, &c. (108); and it will be observed that these three groups account for over 70 per cent. of the total deaths. Whilst very great progress during recent years has been made in the reduction of infantile mortality as a whole (*see* chart, page 18), and more especially in respect of deaths due to gastric and intestinal disorders, so long as congenital conditions, etc., are responsible for an annual loss of life such as is shown above—a loss equal to 26 deaths amongst every 1,000 infants born alive (disregarding the number of still-births, which, strictly speaking, should be added to this figure)—it is evident that we cannot rest content, and must devise even more active measures in the future to prevent this national wastage. This subject is dealt with more fully in the section of the Report dealing with Maternity and Child Welfare.

INFANTILE MORTALITY.



PROPORTION OF DEATHS UNDER 1 YEAR OF AGE PER 1,000 BIRTHS.

Maternal Mortality.—The number of Middlesex women whose deaths occurred during 1925, and were recorded as directly due to puerperal fever and other accidents and diseases of pregnancy and parturition, was 58. This is equivalent to a maternal mortality rate of 2·69 per 1,000 live births, which is rather lower than the rates for the preceding 4 years, and is accounted for by the low incidence of puerperal fever in 1925. The following table affords information of the maternal deaths and death-rates per 1,000 births during the past five years.

Year.	Puerperal fever.		Other accidents and diseases of pregnancy and parturition.		Total.	
	Number of deaths.	Rate per 1,000 births.	Number of deaths.	Rate per 1,000 births.	Maternal deaths.	Maternal mortality-rate.
1921	34	1·35	42	1·67	76	3·02
1922	35	1·47	43	1·81	78	3·28
1923	36	1·55	48	2·07	84	3·62
1924	34	1·55	33	1·50	67	3·05
1925	25	1·16	33	1·53	58	2·69

It may be thought that a total of 58 deaths out of a population of over one million and a quarter is a small matter, and not worthy of any detailed consideration. The significance of the figures, however, will be better appreciated when due weight has been accorded to the following facts :—

1. The deaths represent a loss of women in the prime of life.
2. The chances of life of the newly-born infant are greatly diminished by the death of its mother.
3. Many of the deaths will result in young families being left without the care and guidance of a mother.

4. The number of instances in which the conditions responsible for maternal mortality terminate fatally bears a small ratio to the total incidence of these conditions; and chronic ill-health and disability occur amongst many women who recover from the immediate effects of the illnesses or accidents.

5. Many of the conditions responsible for the mortality are preventable.

6. No appreciable reduction in the rate of maternal mortality has occurred during the past 20 years, although the general and infantile death-rates have shown marked diminution.

The following comparative table demonstrates this :—

Period.	County.		
	Average death-rate from all causes per 1,000 population.	Average infantile death-rate per 1,000 births.	Average total maternal death-rate per 1,000 births.
1901–1905	13·7	124	3·20
1906–1910	12·1	96	2·93
1911–1915	11·0	88	3·22
1916–1920	11·5	71	3·63
1921–1925	10·1	58	3·14

Sanitary Circumstances.

By the Sanitary Officers Order, 1922, Medical Officers of Health of Counties were relieved from the obligation of including in their Annual Reports a summary of the various sanitary services in each district for which the local sanitary authorities are responsible. At the same time it is very desirable, from time to time, to review the general position in the County as a whole, and the present Survey Report affords a suitable opportunity for this. Accordingly I have obtained from the Medical Officers of Health of the several Local Sanitary Authorities in the County information with regard to the following services or provisions, and the detailed information set out under the appropriate headings is based upon this information :—

Water Supply.

Drainage and Sewerage.

Disposal of House Refuse.

Housing.

Isolation Hospitals for ordinary infectious diseases (*see* pages 69 *et seq.*).

Water Supply.—The provision of an abundant and wholesome supply of water is one of the essentials for the maintenance of the health of any community.

The County of Middlesex is very favourably situated in this respect, and there is no large area of the County in which a public supply is not available. Reference to the table on page 22 will show that almost 100 per cent. of the houses in the County are supplied from public sources.

Only in the case of isolated cottages or groups of cottages has reliance to be placed on local supplies from wells.

The water provided by the several companies is pure and abundant, but as a whole is somewhat hard. It is obtained either from rivers or from deep wells in the chalk.

COUNTY OF MIDDLESEX.

District.	Public Water Supply.	Houses supplied, per cent. of whole.
Urban—		
Acton (*Borough*) ...	Metropolitan Water Board	100
Brentford	,, ,, ,,	100
Chiswick	,, ,, ,,	99·9
Ealing (*Borough*) ...	,, ,, ,,	100
Edmonton	,, ,, ,,	100
*Enfield	,, ,, ,,	97·7
Feltham	South-Western Suburban Water Company.	82·7
†Finchley	Barnet Water & Gas Company.	100
Friern Barnet ...	,, ,, ,,	100
Greenford	Rickmansworth & Uxbridge Valley Water Company.	100
Hampton	Metropolitan Water Board	100
‡Hampton Wick ...	,, ,, ,,	99
Hanwell	,, ,, ,,	100
Harrow	Colne Valley Water Company.	100

* *Enfield.*—Hadley and Cockfosters are supplied by the Barnet Gas & Water Company. A few private wells exist in the rural parts of the district.

† *Finchley.*—A few houses are supplied by the Metropolitan Water Board.

‡ *Hampton Wick.*—A few houses supplied from Longford River by H.M. Office of Works.

District.	Public Water Supply.	Houses supplied, per cent. of whole.
Urban—continued.		
*Hayes	Rickmansworth & Uxbridge Valley Water Company.	98
†Hendon	Metropolitan Water Board	100¶
‡Heston & Isleworth	,, ,, ,,	99
Hornsey (*Borough*)	,, ,, ,,	100
Kingsbury	Colne Valley Water Company.	99·4
§Ruislip-Northwood	,, ,, ,,	99·6
‖Southall-Norwood ...	South-West Suburban Water Company.	99·8
Southgate	Metropolitan Water Board	99·8
Staines	South-West Suburban Water Company.	95·8
Sunbury	Metropolitan Water Board	95
Teddington	,, ,, ,,	100
Tottenham	,, ,, ,,	100
Twickenham ...	,, ,, ,,	99·6

* *Hayes.*—One cottage supplied by the South-Western Suburban Water Company. A portion of the district near the eastern boundary is dependent upon shallow wells.

† *Hendon.*—Mill Hill and W. Hendon supplied by Colne Valley Water Company.

‡ *Heston and Isleworth.*—Forty-two houses in parish of Heston supplied by South-Western Suburban Water Company.

§ *Ruislip-Northwood.*—Nine cottages in district supplied by shallow wells and one by deep well.

‖ *Southall-Norwood.*—A small part of district supplied by Metropolitan Water Board.

¶ Practically.

District.	Public Water Supply,	Houses supplied, per cent. of whole.
Urban—continued.		
Uxbridge	Uxbridge District Council Waterworks.	99·6
Wealdstone ...	Colne Valley Water Company.	100
Wembley	,, ,, ,,	99·8
Willesden	Metropolitan Water Board	100
Wood Green ...	,, ,, ,,	100
Yiewsley	Rickmansworth and Uxbridge Valley Water Company (shallow wells at Stockleys).	99
Rural—		
Hendon—		
Parish of—		
Edgware ...	Colne Valley Water Company.	100
Gt. Stanmore ...	,, ,, ,,	100
Harrow Weald	,, ,, ,,	100
Little Stanmore	,, ,, ,,	100
Pinner	,, ,, ,,	100
South Mimms ...	Barnet Water & Gas Company.	99

District.	Public Water Supply.	Houses supplied, per cent. of whole.
Rural—continued.		
*Staines—		
Parish of—		
Ashford	South-Western Suburban Water Company.	54·3
Cranford ...	,, ,, ,,	27·6
E. Bedfont ...	,, ,, ,,	71·0
Hanworth ...	Metropolitan Water Board	75·7
Harlington ...	Rickmansworth & Uxbridge Valley Water Company.	67·2
Harmondsworth	,, ,, ,,	7·7
Laleham... ...	——	—
Littleton ...	——	—
Shepperton ...	West Surrey Water Company.	62·0
Stanwell ...	South-Western Suburban Water Company.	42·1
†Uxbridge—		
Parish of—		
Cowley	Rickmansworth & Uxbridge Valley Water Company.	95·3
Harefield ...	,, ,, ,,	71·1
Hillingdon, E. ...	,, ,, ,,	96·4
Ickenham ...	,, ,, ,,	84·8
Northolt... ...	,, ,, ,,	96·3
West Drayton ...	,, ,, ,,	96·4

* *Staines* (*Rural*).—Part of the Parish of Stanwell is supplied by the Slough District Council Waterworks. The parts of this rural district not provided with water supply, depend mainly upon shallow wells.

† *Uxbridge* (*Rural*).—Rickmansworth & Uxbridge Valley Water Company supplies part of the parish of Northolt. Forty-five houses in the parish of Harefield and other isolated houses in the district are supplied by shallow wells.

Rivers and Streams.—The Middlesex County Council Acts, 1898 to 1921, confer upon the County Council powers of supervision, cleansing and maintenance of the various rivers and streams of the County. The work is carried out by the County Engineer and his staff, and the following information is abstracted from his Annual Reports to the Rivers Committee for the past five years.

The total mileage of the streams in Middlesex is 129 miles. With the rapid development in the direction of urbanisation of a great part of the County, the character of the streams is being changed from natural watercourses to channels for the drainage of developed areas. In consequence there has been need for increased supervision of the streams during the last few years, more particularly in view of the fact that the growth of a district is not invariably accompanied by a corresponding growth in its sewage disposal works. In this connection may be enumerated the following improvements which have been effected in sewage disposal works during the past five years :—

Finchley.—The construction of new tanks and filters with a resulting good effluent.

Hanwell.—The addition of one large sedimentation tank and two humus tanks to the filter plant.

Kingsbury.—The reconstruction of these tanks has now been completed.

Southall-Norwood.—The construction of five new sprinkler rotary filters. Large extensions are proposed.

Wembley.—Entire reconstruction of the sewage disposal works with a subsequent noticeable improvement in the quality of the River Brent.

Hendon (*Rural*).

Pinner.—The conversion of an old septic tank into a sedimentation tank and the construction of new filters.

Edgware.—The construction of new sedimentation tanks, filters and humus tanks.

The following improvements and extensions are now in progress :—

Edmonton.—Very extensive alterations are now in process of being carried out at an estimated cost of £160,000, and it is hoped that the new disposal works will be complete in about 12 months' time. When these works are reconstructed no serious pollution, apart from surface water, should reach the River Lee from Middlesex streams.

Harrow (*Roxeth*).—New tanks are being constructed.

Hendon (*Urban*).—Large extension, new tanks and percolating filters are being constructed.

During the year, 83 samples of sewage effluents were taken and were analysed with the following results :—

62 or 74·7 per cent. good.
7 or 8·5 per cent. moderate.
14 or 16·8 per cent. bad.

These results compare favourably with those of previous years.

Drainage and Sewerage.—The table on page 28 sets out in some detail the position with regard to drainage and sewerage in Middlesex. It will be observed that as a whole the local authorities in the County can satisfactorily deal with the sewage at the present time and for some time to come. I am of opinion, however, that the problem of main drainage, sooner or later, will need to receive careful consideration.

The three factors which have especial importance in this connection are :—

(1) The evidence given on behalf of the London County Council before the Royal Committee on Greater London that the capacity of the Thames to absorb any greater bulk of effluent has nearly been reached.

(2) The more rural districts in Middlesex are rapidly becoming urbanised.

(3) In certain areas in the County, especially in the south-west, disposal of sewage by ordinary methods is extremely difficult.

In addition to the information with regard to drainage and sewerage a statement is included in the table as to the proportion of houses provided with water closets.

—	Main sewerage system.	Houses draining into sewers (per cent.).	Proportion of sewage treated at district's own sewage works.	Proportion of sewage treated at disposal works of other authorities.	Works adequate for present needs.	Works adequate or capable of extension to meet future needs.	Houses provided with W.Cs. (per cent.).	Cesspools and pail closets.	
								Emptied free of charge by district council.	Contents, how disposed of.
Urban.									
Acton	Yes	100	Part	Part (*a*)	Yes	Yes	100	—	—
Brentford	Yes	100 (*h*)	All	—	Yes	Yes	100 (*h*)	No	—
Chiswick	Yes	99·9	All	—	Yes	Yes	100	—	—
Ealing (*Borough*)	Yes	100	All (*h*)	—	Yes	Yes	100	—	—
Edmonton	Yes	100	All	—	Yes	Yes	100	3 out of 6	—
Enfield	Yes	99·3	All	—	Yes	Yes	100 (*h*)	No	Burial
Feltham	No	0	—	—	—	—	90	No	Burial
Finchley	Yes	100	All	—	Yes	Yes	100	—	—
Friern Barnet	Yes	100	Nil	All (*a*)	Yes	Yes	100	—	—
Greenford	Yes	50	All	—	No	No	75	No	Burial
Hampton	Yes	97(*b*)	All	—	Yes	Yes (*g*)	98	Some	—
Hampton Wick	Yes	99·5	Nil	All (*c*)	Yes	Yes	100	No	—
Hanwell	Yes	100	—	—	—	—	100	—	—
Harrow	Yes	99	All	—	Yes	Yes (*g*)	99	No	—
Hayes	Yes	96	All	—	Yes	Yes (*g*)	99	Yes	—
Hendon	Yes	100 (*h*)	All	—	Yes	Yes	100 (*h*)	Yes	Burial
Heston and Isleworth	Yes	99	All	—	Yes	Yes	99	No	Burial

Hornsey (*Borough*)	Yes	100	$\frac{1}{10}$	$\frac{9}{10}$(*a*)	Yes	Yes	100	—	—
Kingsbury	Yes	95	All	—	Yes	Yes	98	No	—
Ruislip-Northwood	Yes	97·6	All	—	Yes	Yes	97·6	No	—
Southall-Norwood	Yes	100 (*h*)	—	All (*d*)	Yes	Yes	100 (*h*)	No	—
Southgate	Yes	99·8	—	All (*e*)	Yes	Yes	100	No	—
Staines	Yes	92	All	—	Yes	Yes	96	No	—
Sunbury	Yes	87·5	All	—	No	Yes	87·5	No	Burial
Teddington	Yes	99	All	—	Yes	Yes	99	No	—
Tottenham	Yes	100 (*h*)	—	All (*a*)	Yes	Yes	100	No	—
Twickenham	Yes	99·8	All	—	Yes	No	99·9	No	Burial
Uxbridge	Yes	99·3	All	—	Yes	Yes	99·5	Yes	—
Wealdstone	Yes	99	All	—	Yes	Yes (*g*)	100	No	—
Wembley	Yes	99·8	All	—	Yes	Yes	99·8	No	Burial
Willesden	Yes	100	Nil	All (*a*)	Yes	Yes	100	No	—
Wood Green	Yes	99·9	Nil	All (*a*)	Yes	Yes	99·9	No	Burial
Yiewsley	Yes	99	Nil	All (*f*)	Yes	No	99	Yes	Burial
Rural.									
Hendon—									
Parish of—									
Edgware	Yes	99·5	All	—	Yes	Yes	99·5	Yes	—
Gt. Stanmore	Yes		All	—	Yes	Yes		Yes	—
Harrow Weald	Yes		All	—	Yes	Yes		Yes	—
Little Stanmore	Yes		All	—	Yes	Yes		Yes	—
Pinner	Yes		All	—	Yes	Yes		Yes	—
South Mimms	Yes	95	All	—	Yes	Yes	95	No	—

(*a*) Sewage is passed into the sewers of the London County Council.

(*b*) A number of bungalows on Thames Ditton Island have only earth closets. Negotiations are in hand for connecting the island to the main sewer.

(*c*) Disposal works at Kingston-on-Thames.

(*d*) Disposal works at Isleworth.

(*e*) Sewage is treated at the Edmonton District Council's sewage works.

(*f*) Sewage disposal works at Cowley Peachey.

(*g*) Extensions for future needs now in progress.

(*h*) Practically.

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	Main sewerage system.	Houses draining into sewers (per cent.).	Proportion of sewage treated at district's own sewage works.	Proportion of sewage treated at disposal works of other authorities.	Works adequate for present needs.	Works adequate or capable of extension to meet future needs.	Houses provided with W.Cs. (per cent.).	Cesspools and pail closets. Emptied free of charge by District Council.	Contents, how disposed of.
Rural—continued.									
Staines—									
Parish of—									
Ashford	No	10 per cent.	—	—	No	No	—	No	Burial
Cranford	Part		—	—	No	No	—	No	,,
E. Bedfont	No		—	—	No	No	—	No	,,
Hanworth	No		—	—	No	No	—	No	,,
Harlington	No		—	—	No	No	—	No	,,
Harmondsworth	Part		—	—	No	No	—	No	,,
Laleham	No		—	—	No	No	—	No	,,
Littleton	No		—	—	No	No	—	No	,,
Shepperton	No		—	—	No	No	—	No	,,
Stanwell	No		—	—	No	No	—	No	,,
Uxbridge—									
Parish of—									
Cowley	Yes	90	All	—	Yes	No	93	No	—
Harefield	Part	60	All	—	—	—	77	No	—
Hillingdon E.	Yes	78	All	—	—	No	97	Yes	—
Ickenham	No	Nil	—	—	No	No	78	No	—
Northolt	No	8	Nil	—	No	No	72	No	—
West Drayton	Yes	94	All	—	Yes	No	97	No	—

House Refuse.—Reference to the table on page 34 will show that in most districts in the County refuse is collected at least once weekly from the houses. Especially during the summer months is it important that refuse should not remain in the vicinity of houses longer than is absolutely necessary, and a minimum of one collection weekly should be maintained. In many districts modern carts for the collection of refuse have been provided; these are fitted with suitable covers which prevent paper and other articles from being blown away or spilt, and are supplied with a mechanism to render tipping easy: the complete replacement of the old-fashioned carts with this type of vehicle is very desirable in the interests of cleanliness.

It is to be regretted that the disposal of house refuse in the County is not in as satisfactory a position as is the case with the collection, and the subject is of sufficient importance and urgency to merit somewhat detailed consideration.

The composition of house refuse varies with the social character of the area from which it is collected and with the season of the year. Notwithstanding these variations, however, for practical purposes it may be taken to consist of five chief parts :—

(1) Combustible material, cinders, etc.
(2) Practically incombustible solid matter, *i.e.*, grit, ashes and other mineral substances.
(3) Tins, glass, crockery.
(4) Paper.
(5) Organic matter.

It is the last-named part which is capable of putrefaction and is responsible for the nuisances arising in connection with refuse disposal. Fortunately this part constitutes a very small proportion of the whole. Whilst constituents (1) and (2) may be considered to supply about one-third each of the total mass of house refuse, (3), (4) and (5) together form the remaining one-third.

The methods by which refuse may be dealt with are four, viz., tipping, pulverisation, separation and incineration, or a combination of two or more of these. As will

be seen from the table on page 34, in 22 districts in Middlesex the method of tipping is employed. Where sufficient and suitable land is available disposal by tipping, if the necessary precautions are observed, has two merits : it is the most inexpensive method, and by its use it is possible to raise the level of land which otherwise would be without value. On the other hand tipping is responsible for some of the most unpleasant features to be found in the County. These are due entirely to carelessness in method and lack of proper tip management. The nuisances which arise in connection with improperly supervised tips primarily are occasioned by the small amount of organic matter mentioned before, which results in plagues of flies, rats and crickets, and annoyance from smell, the last-named being almost always due to the tips being on fire. Apart from the huge tips of refuse brought into certain districts in Middlesex from other populous districts in the County and from London boroughs, there are a number of tips of house refuse collected locally which have been allowed to fire, and with their acrid smoke, create a condition which is entirely unnecessary, and should not be permitted to continue. The fallacy that the firing of tips is the most hygienic method of dealing with refuse has long been exploded, and if the very useful suggested precautions with regard to refuse tips, drawn up by the Ministry of Health, are followed, there is no need for the disposal of refuse by tipping to be accompanied by any nuisance, always providing suitable land is available. These suggestions are set out in full on pages 36 and 37 of this report, and their proved value is such that I would suggest to all local Medical Officers of Health consideration of local conditions with a view to decision as to the desirability of the adoption by the District Council of the suggested precautions as bye-laws under Section 44 of the Public Health Act, 1875. Sanction for this course already has been granted by the Ministry of Health on the application of the Urban District Council of Yiewsley, and the universal adoption of the precautions should prove a useful means of reducing nuisance and annoyance arising from burning refuse ; needless to add it would be necessary for the Councils themselves to take steps to ensure strict adherence in the case of their

own tips, but whether the suggestions are adopted as bye-laws or not, the precautions should be observed by all local sanitary authorities. In many districts in the County the greatest difficulty in dealing with tips arises from the fact that the sub-soil is clay, and this is not a very suitable material to provide efficient covering for tipped refuse. This difficulty may be met either by using road sweepings as a covering if sufficient quantities are available, or by "screening" the refuse on the tipping site and utilising the fine mineral dust and ashes so obtained as a covering for the remaining rubbish.

If suitable land is not available, resource should be had to one or other of the alternative methods of disposal previously enumerated. No useful purpose would be served by discussing the relative merits of each, as local circumstances determine which method is most suitable for any particular district. Suffice it to say that substantial advances have been made in the scientific treatment of refuse during recent times, and now it is possible for any district to adopt some system suited to its requirements, which will dispose of the refuse without nuisance and at a much lower cost per ton than was the case some few years ago.

The question of the disposal of house refuse has been dealt with rather fully, but it is one of especial importance in a County which is becoming so highly urbanised as Middlesex, and well merits the serious consideration of district councils and their technical advisers. The present position is that in 22 districts tipping is resorted to, in 1 pulverisation is employed during the winter, in 13 disposal is effected by incineration, and in 2 districts refuse is removed from and dealt with (usually by tipping) in other sanitary areas. Details as to each district are given on pages 34 and 35.

House Refuse.

—	How frequently removed from each house.	Collected by Council or contractor.	Method of disposal.		
			By incinerator.	Tipping.	Other methods.
Urban.					
Acton (*Borough*)	Weekly	Council	Yes	—	—
Brentford	,, ...	,, ...	Yes	—	—
Chiswick	,, ...	,, ...	Yes	—	—
Ealing (*Borough*)	,, ...	,, ...	Yes	—	—
Edmonton	,, ...	,, ...	—	Yes	—
Enfield	,, ...	,, ...	—	Yes	Sold to brickmakers.
Feltham	,, ...	,, ...	—	Yes	—
Finchley	Weekly*	Contractor	—	Yes	Burned at sewage farm.
Friern Barnet	,, ...	D.C. and contractor	—	Yes	—
Greenford	,, ...	Contractor	—	Yes	—
Hampton	,, ...	Council	Yes	—	—
Hampton Wick	,, ...	,, ...	—	Yes	—
Hanwell	,, ...	,, ...	Yes	—	—
Harrow	,, ...	,, ...	—	Yes	Burned at sewage farm.
Hayes	,, ...	,, ...	—	Yes	—
Hendon	,, ...	D.C. and contractor	— ¶	Yes	—
Heston and Isleworth....	,, ...	Council	—	Yes	—
Hornsey (*Borough*)	Weekly†	Council	Yes	—	—
Kingsbury	,, ...	Contractor	—	Yes	Burned.
Ruislip-Northwood	,, ...	Council	—	Yes	—
Southall-Norwood	,, ...	,, ...	—	Yes	—

Southgate	,,	,,	Yes	—		—
Staines	,,	,,	—	Yes		—
Sunbury	Weekly‡	,,	—	Yes		—
Teddington	Daily	,,	Yes	—		—
Tottenham	Weekly	,,	Yes	—		—
Twickenham	Weekly§	,,	Yes	—		—
Uxbridge	,,	,,	—	Yes		—
Wealdstone	,,	,,	Half	Half		— **
Wembley	,,	,,	—	—	Removed out of district.	
Willesden	,,	,,	—	—		
Wood Green	,,	,,	Yes	—		—
Yiewsley	,,	,,	—	Yes		—
Rural.						
Hendon	Weekly	Contractor	—	Yes		—
South Mimms	††	....	—	Yes	Burned.	
Staines	Fortnightly	Contractor	—	Yes		—
Uxbridge	Fortnightly‖	Contractor	—	Yes		—

* *Finchley.*—A bi-weekly collection is made from hospitals, nursing homes and other institutions. Trade refuse is collected as required at an annual charge of £1.

† *Hornsey.*—Bi-weekly collection from flats.

‡ *Sunbury.*—In the village of Charlton collection is fortnightly.

§ *Twickenham.*—Daily collection from several blocks of flats.

‖ *Uxbridge (rural).*—Weekly from Mount Park, Northolt.

¶ *Hendon (urban).*—Scheme for destructor in hand.

** *Wealdstone.*—During the winter months about 200 loads are pulverised and the residue sold for manurial purposes.

†† *South Mimms.*—Collection is not undertaken by the District Council, and householders make their own arrangements with two local contractors.

Refuse Tips.

Suggested Precautions.

1. Every person who forms a deposit of filth, dust, ashes or rubbish of such a nature as is likely to give rise to nuisance exceeding * cubic yards, must, in addition to the observance of any other requirements which are applicable, comply with the following rules :—

(1) The deposit must be in layers.

(2) No layer to exceed † feet in depth.

(3) Each layer to be covered, on all surfaces exposed to the air, with at least 9 inches of earth or other suitable substance, provided that during the formation of any layer not more than * square yards may be left uncovered at any one time.

(4) No refuse to be left uncovered for more than 72 hours from the time of deposit.‡

(5) Sufficient screens or other suitable apparatus to be provided, where necessary, to prevent any paper or other debris from being blown by the wind away from the place of deposit.

2. Every person who deposits any filth, dust, ashes or rubbish likely to cause a nuisance if deposited in any water must, so far as practicable, avoid its being deposited in water.

3. Every person who deposits any filth, dust, ashes or rubbish must take all reasonable precautions to prevent the breaking out of fires and the breeding of flies and vermin on or in such deposit.

4. If the material deposited at any one time consists entirely or mainly of fish, animal or other organic refuse, the person making such deposit must forthwith cover it with earth or other equally suitable substance at least 2 feet deep.

5. Every person who deposits any filth, dust, ashes or rubbish must take all practicable steps to secure that tins or other vessels or loose debris likely to give rise to nuisance are not deposited in an exposed condition on or about the place of deposit.

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* Appropriate figures should be inserted here after full consideration of the local conditions. The Ministry will be glad to advise on this point, and, in any event, to be informed of the figures adopted.

† Unless the circumstances are very exceptional the depth of the layer should not exceed 6 feet.

‡ The object of this is to provide that even the surface which is allowed to remain exposed under the proviso to (3) shall be covered up after 72 hours.

6. Sufficient and competent labour must be provided in connection with the deposit to enable the necessary measures to be taken for the prevention of nuisance.

7. So far as practicable each layer of refuse which has been laid and covered with soil must be allowed to settle before the next layer is added.

8. Wherever practicable the person making the deposit must avoid raising the surface of the tip above the general level of the adjoining ground.

9. All refuse must be disposed of with such dispatch and be so protected during transit as to avoid risk of nuisance.

MINISTRY OF HEALTH,
26th July, 1922.

Housing.

Particulars of the work in connection with housing under the various powers included in Public Health and Housing Acts carried out in each sanitary district in Middlesex during 1925 is given on pages 39 and 40.

It will be noted that a total of 9,058 new houses has been erected in the County. Towards the accomplishment of this useful addition to the housing facilities in Middlesex the County Council has played a not inconsiderable part. In pursuance of the powers afforded under the Small Dwellings Acquisition Acts, 1899–1923 and Housing Act, 1925, the County Council has sanctioned during 1925 the advancement of loans in connection with approximately 1,280 houses, and during the financial year 1925–1926 a total sum of £962,380 has been advanced.

—	Acton.	Brentford.	Chiswick.	Ealing.	Edmonton.	Enfield.	Feltham.	Finchley.	Friern Barnet.	Greenford.	Hampton.	Hampton Wick.	Hanwell.	Harrow.	Hayes.	Hendon.	Heston and Isleworth.	Hornsey.	Kingsbury.	Ruislip-Northwood.	Southall-Norwood.	Southgate.	Staines.	Sunbury.	Teddington.	Tottenham.	Twickenham.	Uxbridge.	Wealdstone.	Wembley.	Willesden.	Wood Green.	Yiewsley.	Hendon Rural.	South Mimms Rural.	Staines Rural.	Uxbridge Rural.	Totals for Administrative County.
Number of New Houses erected during the year :—																																						
(*a*) Total (including numbers given separately under (*b*))	298	60	58	241	167	321	35	460	266	146	68	19	69	259	145	986	609	312	87	147	207	552	20	134	75	374	87	94	418	989	385	126	14	515	62	91	224	9,120
(*b*) With State assistance under the Housing Acts :—																																						
(i) By the Local Authority	*Nil*	*Nil*	3	*Nil*	70	137	*Nil*	*Nil*	32	*Nil*	6	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	98	24	35	*Nil*	71	....	50	*Nil*	50	*Nil*	*Nil*	*Nil*	10	*Nil*	*Nil*	*Nil*	*Nil*	28	*Nil*	*Nil*	614
(ii) By other persons or bodies	50*	60	*Nil*	....	11	3	....	*Nil*	*Nil*	132	*Nil*	*Nil*	*Nil*	*Nil*	109	2	463	214	3	12	150	2	....	1	75	*Nil*	8	24	*Nil*	17	65	*Nil*	14	*Nil*	34	53	91	1,593
1. *Unfit Dwelling Houses* :—																																						
Inspection :—																																						
(1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	1,463	403	2,092	1,325	1,168	1,993	162	691	348	33	276	150	633	249	378	748	406	1,718	92	133	365	502	26	659	540	2,820	623	179	692	688	2,945	714	91	561	25	330	170	26,391
(2) Number of dwelling-houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910, or the Housing Consolidated Regulations, 1925	237	27	1,615	584	325	*Nil*	35	*Nil*	26	*Nil*	60	70	142	144	108	58	2	629	*Nil*	63	126	331	15	102	130	794	79	179	38	41	828	714	91	401	*Nil*	450	46	8,490
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	*Nil*	13	*Nil*	*Nil*	*Nil*	*Nil*	1	*Nil*	1	*Nil*	*Nil*	*Nil*	*Nil*	2	5	*Nil*	2	*Nil*	*Nil*	8	59	*Nil*	*Nil*	*Nil*	*Nil*	17	4	2	*Nil*	3	12	*Nil*	11	52	*Nil*	70	47	309
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	271	41	1,067	467	1,188	1,357	130	132	122	33	38	65	517	114	267	486	64	1,311	3	5	317	361	21	98	416	1,724	75	28	545	37	58	3	80	128	*Nil*	35	149	11,753
2. *Remedy of Defects without Service of Formal Notices* :—																																						
Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	493	18	230	432	819	1,134	26	120	152	....	107	61	441	240	176	480	60	1,567	2	5	176	302	2	118	376	1,444	430	23	510	481	652	596	22	126	25	325	*Nil*	12,171
3. *Action under Statutory Powers* :—																																						
A.—Proceedings under Section 3 of the Housing Act, 1925 :—																																						
(1) Number of dwelling-houses in respect of which notices were served requiring repairs	271	27	811	*Nil*	191	*Nil*	32	1	8	9	3	*Nil*	*Nil*	114	19	*Nil*	3	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	13	*Nil*	228	64	5	*Nil*	*Nil*	42	3	*Nil*	2	*Nil*	195	*Nil*	2,041
(2) Number of dwelling-houses which were rendered fit after service of formal notices :—																																						
(*a*) By owners	271	13	811	....	111	*Nil*	30	1	2	*Nil*	3	3	*Nil*	42	9	*Nil*	12	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	13	*Nil*	197	60	28	*Nil*	*Nil*	1	3	*Nil*	2	*Nil*	160	*Nil*	1,772
(*b*) By Local Authority in default of owners	*Nil*	*Nil*	*Nil*	....	9	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	1	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	8	1	*Nil*	*Nil*	*Nil*	1	*Nil*	*Nil*	*Nil*	*Nil*	1	*Nil*	21
(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	6	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	4	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	2	*Nil*	*Nil*	*Nil*	*Nil*	2	*Nil*	14
B.—Proceedings under Public Health Acts :—																																						
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	1,099	370	46	127	63	247	*Nil*	3	27	33	107	16	517	198	47	12	11	114	48	8	93	29	27	19	38	50	122	52	48	10	2,715	118	*Nil*	1	25	298	27	6,765
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—																																						
(*a*) By owners	1,099	360	46	104	61	201	*Nil*	3	27	24	3	16	474	191	41	11	15	98	48	8	82	27	27	17	37	42	117	52	38	9	2,631	94	*Nil*	1	25	270	27	6,326
(*b*) By Local Authority in default of owners	*Nil*	*Nil*	*Nil*	....	*Nil*	6	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	3	*Nil*	1	*Nil*	*Nil*	*Nil*	*Nil*	2	*Nil*	*Nil*	1	*Nil*	1	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	2	*Nil*	16
C. Proceedings under Sections 11, 14 and 15 of the Housing Act, 1925 :—																																						
(1) Number of representations made with a view to the making of Closing Orders	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	1	*Nil*	1	*Nil*	*Nil*	*Nil*	*Nil*	1	5	*Nil*	2	*Nil*	*Nil*	8	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	17	4	*Nil*	*Nil*	3	12	*Nil*	*Nil*	*Nil*	*Nil*	2	*Nil*	56
(2) Number of dwelling-houses in respect of which Closing Orders were made	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	1	*Nil*	*Nil*	*Nil*	*Nil*	6	3	*Nil*	2	*Nil*	*Nil*	8	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	17	*Nil*	*Nil*	*Nil*	2	12	*Nil*	*Nil*	*Nil*	*Nil*	2	1	54
(3) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	2	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	2
(4) Number of dwelling-houses in respect of which Demolition Orders were made	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	1	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	6	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	7
(5) Number of dwelling-houses demolished in pursuance of Demolition Orders	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	1	*Nil*	*Nil*	*Nil*	2	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	3

* About.

Inspection and Supervision of Food.

Milk Supply.—The importance of a wholesome, clean milk supply is evident to all, and in certain directions the County Council has duties and powers which enable it to assist towards this end. The activities of the Council are as follows :—

(1) Action under the Milk and Dairies (Consolidation) Act, 1915.

(2) Action under the Milk (Special Designations) Order, 1923.

(3) Action under the Tuberculosis Order, 1925.

(4) Action under the Sale of Food and Drugs Acts, 1875–1907.

(5) Action under the Public Health (Milk and Cream) Regulations, 1912 and 1917.

(6) Action by the Education Committee in promoting Clean Milk Competitions.

(1) *The Milk and Dairies (Consolidation) Act, 1915.* This Act, so far as most of its provisions affecting County Councils are concerned, was postponed by the Milk and Dairies (Amendment) Act, 1922, until the 1st September, 1925, and came into force on that date.

Under Section 1 of the Act the Ministry of Health (with the concurrence of the Ministry of Agriculture and Fisheries) has power to make orders (Milk and Dairies Orders) for several purposes, including—

Registration with local authorities of all dairymen and dairies.

Inspection of cattle in dairies, of dairies, and of persons in or about dairies having access to the milk, &c.

Regulation of the sanitary and hygienic conditions in dairies and milkshops, including provision to ensure cleanliness of milk vessels.

Protection of milk against infection and contamination, and prevention of danger to health from the sale of infected, contaminated or dirty milk.

Regulation of methods of cooling, conveyance and distribution of milk, the labelling, marking, sealing, &c., of milk vessels.

Prohibition of the addition of colouring matter, skimmed milk, water, &c., to milk.

Orders made as above are to be administered by local authorities, and, under the terms of the Act, County Councils are included in the definition of local authorities. The Act states, however, that the Ministry of Health may prescribe in any Milk and Dairies Order the local authorities by which the several provisions thereof are to be enforced and executed. It is not possible to forecast what duties under the above Section will devolve on the County Council until such orders are issued, but it would appear likely that many of the duties will be allocated to local sanitary authorities, who already are responsible for the administration of the majority of the laws relating to dairies, cowsheds and milkshops, whilst others will devolve on County Councils as authorities under the Sale of Food and Drugs Acts.

Several of the sections of the Act, however, are of very great importance, and cast upon County Councils in definite terms new duties which may entail a considerable increase in the work of the authorities.

Under Section 3 of the Act, if a medical officer of health of a County is of opinion that tuberculosis is caused, or is likely to be caused, by the consumption of the milk supplied from any dairy in which cows are kept within such County, he must report the matter to the Council, and his report must be accompanied by any necessary veterinary or bacteriological report furnished to him. The Council shall then take certain steps with a view to stopping the milk supply. As result of their investigation the Council *may* make an order prohibiting a dairyman, either absolutely or unless certain conditions are complied with, from supplying for human consumption, &c., any milk from the dairy, or from any particular cow or cows, until the order is withdrawn. If no order is made the responsible authority shall allow the dairyman reasonable expenses incurred by him in showing cause why the order should not be made,

whilst, if the order is made, unless it is consequent upon default or neglect on the part of the dairyman, the latter is entitled to full compensation for any damage or loss he may have sustained by reason of the making of the order. Similarly, the dairyman is entitled to compensation if an authority unreasonably neglect or refuse to withdraw an order made against him.

Section 4 of the Act is as follows :—

(1) If the medical officer of health of any local authority has reason to suspect that tuberculosis is caused, or is likely to be caused, by the consumption of any milk which is being sold or exposed or kept for sale within the area of the local authority, he shall endeavour to ascertain the source or sources of supply, and on ascertaining the facts shall forthwith give notice of them to the medical officer of health of the county or county borough in which the cows from which the milk is obtained are kept, whether the dairy where they are kept is within or without the area of the local authority, unless the local authority are themselves the council of that county or county borough.

(2) On the receipt of such notice it shall be the duty of the medical officer of health of the county or county borough to cause the cattle in the dairy to be inspected, and to make such other investigations as may be necessary.

(3) Sufficient notice of the time of the inspection shall be given to the local authority whose medical officer of health gave the notice, and to the dairyman to allow that officer or a veterinary inspector or other veterinary surgeon appointed by the authority, and, if desired, another veterinary surgeon appointed by the dairyman being present at the inspection if either party so desire.

(4) The council of the county or county borough on whose medical officer of health the notice is served shall send to the medical officer of health of the local authority who gave the notice copies of any reports which may have been made by the medical officer of health making the inspection, and of any veterinary or bacteriological or other reports which may have been furnished to him, and shall give him information as to whether any action has been taken upon those reports and as to the nature of that action.

Section 5 prohibits the sale for human consumption, or use in the manufacture of products for human consumption, of the milk of any cow which has given tuberculous milk or is suffering from—

Emaciation due to tuberculosis.
Tuberculosis of the udder.

Acute inflammation of the udder.
Acute mastitis.
Actinomycosis of the udder.
Anthrax.
Foot-and-mouth disease.
Suppuration of the udder.
Any disease affecting cows which, by a Milk and Dairies Order, is declared to be a disease for the purposes of Section 5 of this Act.

The duty of taking proceedings under this section by Section 18 (5) is placed upon County Councils and County Borough Councils, without prejudice to the power of a sanitary authority taking similar action.

(Attention may be drawn to the fact that under the Milk and Dairies (Amendment) Act, 1922, similar duty is placed upon local sanitary authorities in the case of the sale of milk from any cow with tuberculosis of the udder.)

Sections 6 and 7 relate to the marking of vehicles and receptacles from which milk is sold and the labelling of receptacles containing condensed, separated and skimmed milk.

Section 8, *inter alia*, empowers inspectors of the Ministry of Health, medical officers of health of local authorities, or any person provided with written authority by such an inspector, local authority or medical officer of health, to take samples of milk for examination. Further, the medical officer of health or other authorized officer in any area where milk is being sold may require the similar officers of the authority for the purposes of the Sale of Food and Drugs Acts of the area in which the milk is produced to take samples of the milk either at the source of production or in transit before leaving the area, and in this event the officers receiving the request must comply as soon as practicable.

Under Section 10 a local authority may, and when required by the Ministry of Health must, appoint veterinary inspectors or employ for the purposes of this Act and the Milk and Dairies Orders veterinary inspectors appointed under the Diseases of Animals Act, 1894. Similarly, local authorities may, and when required by the Ministry of

Health must, provide or arrange for the provision of such facilities for bacteriological or other examination of milk as may be approved by the Ministry, and Section 15 (4) states that any inspection of cattle made in pursuance of this Act or any Milk and Dairies Order must be carried out by a veterinary inspector or other properly qualified veterinary surgeon.

In the event of a local authority failing to fulfil any of its duties under this Act or under any Milk and Dairies Order, Section 13 empowers the Ministry of Health to hold a local inquiry and compel the authority to fulfil its duties, and if the authority is a District Council the duties may be transferred to the County Council.

Section 15 (2) gives power to a local authority to delegate to a committee any of its powers or duties (other than the power of raising rates) under this Act or any Milk and Dairies Orders.

In addition to the provisions set out above, the Act contains important amendments with regard to procedure under the Sale of Food and Drugs Acts.

It will be noted that the action which needs to be taken under the provisions of this Act relating to tuberculous milk falls into two main groups :—

(*a*) Action taken by the County Council as result of representations from other local authorities.

(*b*) Action initiated by the County Council.

With regard to the former, no requests from other authorities have been received during 1925.

As to the latter, there are some 1,100 retailers of milk in the County, and in order to gain knowledge of the extent to which the milk supply in the County is affected, the County Council arranged for the taking of six samples of milk weekly from the various milk producers and retailers in the County, and the submission of these to bacteriological examination followed by animal inoculation tests. This course has been followed, and 89 samples have been submitted for examination during 1925. Bacteriological examination of all specimens has failed to reveal the presence of tubercle bacilli. Animal inoculation tests similarly have failed to show the presence of tuberculosis.

Some of the samples were of milk sold in Middlesex, but produced elsewhere, but the majority of the samples referred to have been obtained from Middlesex producers.

In order to ensure efficient co-operation with the work of the Diseases of Animals Sub-Committee of the Council, the six veterinary surgeons employed as veterinary inspectors under the Diseases of Animals Acts were appointed as veterinary inspectors for the purposes of this Act. The work of collecting samples of milk and transporting them to the approved laboratory for bacteriological, &c., examination is undertaken by officers engaged in work under the Sale of Food and Drugs Acts.

(2) *The Milk (Special Designations) Order, 1923*, issued by the Ministry of Health under the Milk and Dairies (Amendment) Act, 1922, empowers the granting of licences to produce or retail "designated" milk. The Order sets out certain conditions of production which must be observed, and standards of bacteriological purity of milk which have to be maintained by licensees. Milk sold under these licences is termed "designated" milk, and the Order contains four separate "designations":—

(1) Certified milk.—This is milk produced from herds which are shown to be free from tuberculosis as result of tests with tuberculin.

The standard of bacteriological purity required for milk of this grade is very high.

(2) Grade A (Tuberculin tested).—This milk is produced from herds free from tuberculosis, but the standard of bacteriological purity required, although high, is below that of "certified milk."

(3) Grade A.—This milk is of the same degree of bacteriological purity as (2), but the herd is not required to be tested with tuberculin.

(4) Pasteurised milk.—This milk must be pasteurised by an approved method, and must attain a higher degree of bacteriological purity than Grade A, although not so high as in the case of "certified milk."

The Order places the duty of licensing *distributors* of "designated" milks upon local sanitary authorities, but

power to issue licences for *production* of such milk varies according to the actual designation concerned. Producers of Certified and Grade A (Tuberculin tested) milk are licensed by the Ministry of Health, licences for the production of Grade A milk are issued by County Councils, whilst the duty of licensing the pasteurisation of milk rests with local sanitary authorities.

In the past year four producers of Certified milk and one producer of Grade A (Tuberculin tested milk) in Middlesex have held licences granted by the Ministry of Health, and one producer of Grade A milk has held a licence granted by the County Council.

The examination of 8 samples of Grade A milk taken from the producer referred to, showed that on three occasions within a short period of time milk failed to conform to the required standard, inasmuch as bacillus coli was present in 1/100 cc., although the total bacterial counts were low, viz., 11,850, 12,420 and 14,450 respectively. The methods at the farm were carefully scrutinised, but no evidence of lack of care was found, and subsequent samples were well within the limits required for Grade A milk.

(3) *The Tuberculosis Order, 1925*, issued by the Board of Agriculture, which came into operation on 1st September, 1925, is administered by the Diseases of Animals Sub-Committee of the County Council, and aims at the destruction of every cow suffering from tuberculosis of the udder or giving tuberculous milk, and every bovine animal suffering from tuberculous emaciation or suffering from chronic cough and showing definite clinical signs of tuberculosis.

Administration of the Order in the County is being carried on with activity, and 30 cattle were slaughtered under its provisions before the end of 1925. Action under the Order will decrease the probability of tuberculous milk finding its way on to the market, and effective co-operation in the administration of the Tuberculosis Order, 1925, and the Milk and Dairies (Consolidation) Act ultimately should result in a marked reduction in the prevalence of human infection with tuberculosis of bovine origin.

Full details of the results of visits of inspection under the Order made by the veterinary inspectors are forwarded to the County Medical Officer for his information, and in the

event of a sample of milk taken from a Middlesex producer, under the powers of the Milk and Dairies (Consolidation) Act, 1915, being found to contain tubercle bacilli, immediate notification would be sent by the County Medical Officer to the appropriate veterinary inspector so that he might proceed to put the Order into operation.

(4) and (5). For information as to action in connection with milk and cream under the *Sale of Food and Drugs Acts* and the *Public Health (Milk and Cream) Regulations, 1912 and 1917*, see pages 50 *et seq.*

(6) The Middlesex Education Committee appointed a Dairy and Husbandry Instructor (Mr. Rae) in 1924, and since that date has maintained a progressive policy with regard to the education of farmers in the principles of clean milk production. In 1924 *a clean milk competition* was inaugurated, and met with a considerable degree of success. In 1925, a second clean milk competition was started, and is now being carried on. The purpose of these competitions is to instruct milk producers and their employees in the feasibility of producing a milk of great purity and cleanliness without the incurring of excessive expenditure on plant and premises. A clean milk competition, therefore, whilst being of an educative character, exercises a very valuable influence on the quality of an important item in the food supply of the people.

The objects of the competition are attained by visits to competitors, both before and during the course of the competition, by the Committee's Dairy Instructor, who gives advice to producers and arranges for the taking of a series of samples of milk for bacteriological examination and testing of keeping property. Competitors are kept informed of the results of the periodic examinations of their milk, and any evidence of falling away from a standard already attained is discussed with the producer concerned, with a view to discovering the probable cause, and preventing a similar error in method in the future. The following rules have been printed in poster form, and are supplied to competitors for exhibition in a conspicuous position in the cowsheds :—

Cowshed Rules for Clean Milk Production.

1. The cow must be healthy.

2. The shed must be clean, well lighted and ventilated. The surroundings also should be clean.

3. Any operation likely to produce dust just before or during milking must be avoided.

4. The cow must be clean. Washing with water gives the best result.

5. After washing, the udder and teats must be wiped with a clean damp cloth.

6. The milker's hands and clothes must be clean. The milking stool must also be clean.

7. The milk pail should have as small an opening as can be used.

8. The first stream of milk from each teat should be rejected and the practice of wet-handed milking should be avoided.

9. Milk should be removed from the cowshed immediately after milking, and strained.

10. Milk should be handled in a clean, airy, well lighted shed kept solely for the purpose.

11. Milk must be cooled. Cool to 50 deg. F. where possible, otherwise to the lowest temperature obtainable.

12. Milk should be kept as cool as possible in closed vessels during storage and transit.

13. Milk utensils, including the cooler, should be rinsed with cold water immediately after use.

14. After rinsing, the utensils should be thoroughly washed and scrubbed with hot water to which soda has been added.

15. After washing, rinse utensils in clean water and sterilise by steam.

16. Sterilisation depends entirely on heating the utensils to a sufficiently high temperature for a sufficient period of time. Scalding will not sterilise.

17. Sterilised utensils must be protected from contamination until required.

18. Straining cloths and udder cloths and everything that comes either directly or indirectly in contact with the milk must be washed and sterilised after each milking.

Rules compiled by the National Institute for Research in Dairying, and issued by the Middlesex Education Committee,

Agricultural Education Sub-Committee,

40, Eccleston Square, S.W. 1.

Sale of Food and Drugs Acts.

The following particulars—showing work carried out during 1925 by the County Council in connection with the above Acts—have been prepared by R. Robinson, Esq., the Chief Officer of the Public Control Department :—

Sale of Food and Drugs Acts.

Article.	Formal Samples.		Informal Samples.	
	Taken.	Adulterated.	Taken.	Adulterated.
Almonds, ground ...	—	—	11	—
Apples	2	—	11	1
Arrowroot	1	1	28	2
Bread	—	—	1	—
Burnt Sienna ...	—	—	1	1
Butter	1	1	260	3
Carraway seeds ...	—	—	7	1
Cinnamon	3	2	45	7
Cocoa	—	—	25	—
Cod liver oil and malt	—	—	3	1
Coffee	—	—	8	—
Cornflour	—	—	18	—
Cream	33	28	4	—
Cream, preserved ...	4	—	2	—
Cream cheese ...	—	—	6	—
Cream of tartar ...	—	—	7	—
Curry powder ...	2	—	15	—
Dripping	—	—	2	—
Eggs, dried	—	—	1	—
Egg powder... ...	—	—	4	—
Egg substitute powder	—	—	1	—
Fish paste	—	—	6	—

Article.	Formal Samples.		Informal Samples.	
	Taken.	Adulterated.	Taken.	Adulterated.
Flour	—	—	1	—
Food colour... ...	—	—	1	—
Fruit, crystalized ...	—	—	8	—
Fruit, dried	—	—	11	—
Fruit, tinned ...	—	—	2	—
Ginger, ground ...	—	—	4	—
Ginger, preserved ...	—	—	2	—
Iodine, tincture of ...	—	—	5	—
Jam	—	—	23	3
Macaroni	—	—	3	—
Margarine	—	—	1	—
Mayonnaise ...	—	—	1	—
Meat, cooked ...	—	—	9	—
Meat paste	—	—	7	—
Milk	446	76	3	—
Milk, new	110	31	22	4
Milk, condensed machine-skimmed ...	—	—	1	—
Milk, dried machine-skimmed	—	—	1	—
Milk, separated ...	2	—	—	—
Mincemeat	—	—	1	—
Mustard	1	—	25	1
Nutmeg	—	—	17	—
Paraffin, liquid ...	—	—	1	—
Peel, candied ...	—	—	1	—
Pepper	—	—	26	—
Prescriptions ...	34	7	4	2
Rice	—	—	5	—
Rum	—	—	1	—
Sausage	—	—	4	—
Spice, mixed ...	—	—	13	—

Article.	Formal Samples.		Informal Samples.	
	Taken.	Adulterated.	Taken.	Adulterated.
Sugar	—	—	3	—
Sweets	3	1	32	—
Tea	—	—	2	—
Turmeric powder ...	—	—	1	—
Vinegar	1	—	—	—
Whisky	7	6	1	1
White precipitate ointment	—	—	6	—
Total ...	650	153	714	27

PUBLIC HEALTH (CONDENSED MILK) REGULATIONS, 1923.

PUBLIC HEALTH (DRIED MILK) REGULATIONS, 1923.

These Regulations, which are administered by the Public Control Department, have not occupied much of the time of the inspectors since the provisions of the Regulations became fully known and understood. When the Condensed Milk Regulations came into force on 1st October, 1923, steps were taken to bring their requirements to the notice of all dealers in condensed milk in the County of Middlesex, and between the date named and 31st March, 1924, 44 infringements were discovered and reported. One wholesale firm was prosecuted and fined for sending out a consignment of condensed milk not labelled in the prescribed form. Practically all the other infringements were committed by retailers, to whom official cautions were sent. Since then no infringement of the Condensed Milk Regulations has been reported.

The observance of the Dried Milk Regulations has been even more satisfactory. From the date when these

Regulations came into force up to the present time only two infringements have been reported, and in each of these cases an official caution was given.

If manufacturers of condensed milk and dried milk comply with the Regulations—and it is clearly in their interest to do so—infringements by retailers are not likely to occur. The experience of the staff of the Public Control Department is that the promulgation of the Regulations has itself been nearly sufficient to secure their observance. It does not appear necessary that inspection and sampling should be frequent, but those inspections and analyses which are made seem to prove that the Regulations are thoroughly well observed in Middlesex.

The following are details of the work done under the Public Health (Milk and Cream) Regulations by the Public Control Department :—

1. *Milk and Cream not Sold as Preserved Cream.*

——	(*a*) Number of Samples examined for the presence of a Preservative.	(*b*) Number in which a Preservative was reported to be present.
Milk	583	—
Cream	37	28

[In addition to the above, officers of the Public Control Department examined by rough sorting out tests 96 informal samples of cream, of which 41 were found to contain boric acid.]

The nature of the preservative in each case in column (*b*) and the action taken are as follows :—

			Per cent.	
Cream—				
Sample	1...	Boric acid ...	0·3	Fined £1 and 15*s*. costs.
,,	2*	,, ...	0·2	No action taken.
,,	3...	,, ...	0·33	Fine £1 and 15*s*. costs.
,,	4...	,, ...	0·32	Fine £1 and 15*s*. costs.
,,	5...	,, ...	0·2	19*s*. costs only imposed.
,,	6*	,, ...	0·35	Fine £5 5*s*. as costs.
,,	7...	,, ...	0·34	Fine £1 and 15*s*. costs.
,,	8...	Boric acid and only 27·3 per cent. fat	0·1	Fine £2 and 15*s*. costs.
,,	9...	Boric acid, and only 27·5 per cent. fat	0·21	Fine £2 and £2 17*s*. costs.
,,	10...	Boric acid ...	0·24	Fine £1 and 15*s*. costs.
,,	11...	,, ...	0·28	Fine £5 and 15*s*. costs.
,,	12...	,, ...	0·28	Fine £1 and 15*s*. costs.
,,	13...	,, ...	0·35	Fine £1 1*s*. and £1 1*s*. costs.
,,	14...	,, ...	0·28	Fine £3 as costs.
,,	15...	,, ...	0·45	Fine £2 and £1 costs.
,,	16...	,, ...	0·31	Fine £2 and £1 costs.
,,	17...	,, ...	0·28	Fine £2 and £1 costs.

* Sample 6 was taken in the course of delivery to the vendor of Sample 2.

			Per cent.	
Cream—				
Sample 18...	Boric acid	...	0·28	Fine £2 and £1 costs.
,, 19...	,,	...	0·29	15*s*. costs only imposed.
,, 20...	,,	...	0·31	15*s*. costs only imposed.
,, 21...	,,	...	0·28	Fine £2 and £1 10*s*. costs.
,, 22...	,,	...	0·3	Vendor officially cautioned.
,, 23...	,,	...	0·31	Fine £1 and £1 1*s*. costs.
,, 24...	,,	...	0·33	Summons dismissed.
,, 25...	,,	...	0·28	Fine £1 and £1 1*s*. costs.
,, 26...	,,	...	0·22	Fine 10*s*. and £1 1*s*. costs.
,, 27...	,,	...	0·18	Fine £2 and £1 costs. Vendor previously convicted for similar offence.
,, 28...	,,	...	0·26	Fine £3 3*s*. as costs.

2. *Cream sold as Preserved Cream.*

(*a*) Instances in which samples have been submitted for analysis to ascertain if the statements on the label as to preservatives were correct :—

(i) Correct statements made	6
(ii) Statements incorrect	—
Total	6

(*b*) Determinations made of milk fat sold as preserved cream :—

(i) Above 35 per cent.	6
(ii) Below 35 per cent.	—
Total	6

(*c*) Instances where (apart from analysis) the requirements as to labelling or declaration of preserved cream in Article V (1) and the proviso in Article V (2) of the Regulations have not been observed—Nil.

(*d*) Cases where (apart from analysis) the requirements as to labelling have not been observed—Nil.

3. *Thickening substances.*—Nil.

Infectious Diseases.

Notifiable Diseases other than Tuberculosis.

Smallpox.—No case was notified in the County during 1925. The relative freedom from smallpox which has been experienced in Middlesex during recent years is apt to render residents, even those in positions of authority, somewhat forgetful of the extremely serious nature of the malady and of the dangerously susceptible condition of the majority of the population. During the past five years only 24 cases of smallpox have occurred in the County, but of these four were attended with fatal results, which gives a case mortality rate of 16·6 per cent., and it is only necessary to refer back to the year 1902, when 1,711 cases were notified in Middlesex, of which 283 died, to appreciate the very grave results which may be attendant upon an outbreak of smallpox. Last year attention was called to the continued prevalence of smallpox in England and Wales, and it was pointed out that no less than 3,699 cases had been notified during 1924; the present year marks a serious increase on this number, and the total for 1925 has risen to 5,355. Fortunately for this country, up to the present, the type of the disease has not proved very fatal in character, but in many cases very unpleasant symptoms or complications have attended the infection; moreover, apart from individual suffering consequent on the illness, the loss of workers' time and the loss of national trade occasioned by fear on the part of customers to purchase articles produced in districts where smallpox is prevalent, impose a financial burden which cannot be overlooked.

From any of the centres in this country where infection is rife, or from any country abroad where the disease exists, smallpox may be introduced into Middlesex, and in the present state of our knowledge it is impossible to forecast whether the infection once introduced will or will not assume a virulent and fatal character. The various public health officials in the several districts in the County are keenly alert to the need for instant and efficient action whenever the suspicion of the presence of smallpox arises,

and the arrangements made by the Middlesex County Council with the London County Council whereby the services of the latter's expert advisers on smallpox are available, by day or night, for the purposes of the diagnosis of smallpox in Middlesex, are of great value ; yet the risk remains, and the deplorable numbers of persons who fail to avail themselves of the undoubted protection which vaccination confers render the need for adequate and instantly available provision for the isolation of cases of smallpox one of the most important public health questions of the day.

Scarlet Fever.—A total of 2,264 cases was notified during the year, equivalent to a case-rate of 1·74 per 1,000 persons. These figures are slightly smaller than those for 1924, when 2,321 cases and a case-rate of 1·80 were recorded. Statistical evidence reveals the circumstance that scarlet fever is a disease which tends to become prevalent at periodical intervals of five to seven years. The last wave of increased prevalence commenced in 1919 and reached its highest point in 1921, since when there has been a gradual and sustained fall. The rate for 1925 is the lowest since 1918.

The mildness of the complaint is emphasised by the fact that only 12 deaths occurred during the year, giving the low death-rate of 0·01 per 1,000 persons. The corresponding death-rate for England and Wales was 0·03, for London 0·02, and for the 105 Great Towns 0·03 per 1,000 persons.

The following table gives the figures relating to the last five years :—

Year.	Cases.	Deaths.	Case-rate per 1,000 living.	Death-rate per 1,000 living.	Case Mortality per cent.
1921	8,130	43	6·45	0·03	0·5
1922	5,134	55	4·06	0·04	1·1
1923	2,378	16	1·87	0·01	0·7
1924	2,321	16	1·80	0·01	0·7
1925	2,264	12	1·74	0·01	0·5

The prevalence of scarlet fever was most marked in the districts of Feltham and Yiewsley ; in the case of the last-named the incidence rate was as high as 6·25 per 1,000 living, this being due to an epidemic which broke out in April. The outbreak was not of a serious nature, and no deaths resulted.

Detailed information as to the incidence of, and death-rate from, scarlet fever in each sanitary district in the County is given in the table on pages 62 and 63.

Diphtheria.—The number of notifications in 1925 was 1,763, equal to a case-rate of 1·35 per 1,000 persons, as compared with 1,487 cases and a case-rate of 1·15 per 1,000 persons in 1924. As a whole the disease was not of a virulent type, and the total number of deaths was 108, equivalent to a mortality rate of 0·08 per 1,000. In England and Wales the diphtheria death-rate was 0·07, in London 0·11 and in the 105 great towns 0·09 per 1,000. The following table indicates the prevalence in the County of diphtheria in each of the last five years :—

Year.	Cases.	Deaths	Case-rate per 1,000 living.	Death-rate per 1,000 living.	Case Mortality. per cent.
1921	3,720	295	2·95	0·23	7·9
1922	3,248	263	2·57	0·21	8·1
1923	1,798	120	1·41	0·09	6·7
1924	1,487	100	1·15	0·08	6·7
1925	1,763	108	1·35	0·08	6·1

Amongst the several districts in the County in five instances the incidence rate of diphtheria exceeded 2·0 per 1,000 persons living, viz., the Urban Districts of Brentford, Edmonton, Ealing, Feltham, and Hampton Wick. In the last-mentioned district the rate was 5·92 per 1,000, but this is accounted for in great part by the smallness of the population and the resulting disproportionate effect an increase of a few cases has upon the incidence rate per 1,000. In the districts of Edmonton and Enfield, however,

there was a very definite prevalence of diphtheria, more especially during the last quarter of the year, and the disease was of a more severe character than was experienced generally in the County. In Edmonton 208 cases with 27 deaths occurred, equivalent to an incidence of 2·92 per 1,000 and a mortality rate of 0·38 per 1,000; in Enfield somewhat comparable figures are noted, viz., 140 cases with 17 deaths, or a case-rate of 2·20 per 1,000 and a mortality of 0·27 per 1,000. Complete information as to the prevalence of and mortality from diphtheria in each sanitary district in the County is given in the table on pages 62 and 63.

Enteric Fever.—The number of cases of this group of diseases notified during 1925 was 74, equal to a case-rate of 0·06 per 1,000 living. Ten of the cases proved fatal, which gives a mortality rate of 0·008 per 1,000 living. The systematic decline in the incidence of typhoid fever in the County, which has been evident since the beginning of the century, is a most satisfactory feature, and as an index of the sanitary conditions obtaining in Middlesex is a matter for congratulation. Medical science has reason to be proud of the marvellous results which were accomplished by inoculation during the Great War, when a very large degree of immunity to enteric fever was conferred on masses of men exposed to risks and conditions, which hitherto had invariably resulted in a heavy toll of casualties from the typhoid group of diseases. At the same time, the gradual reduction in the incidence of typhoid fevers amongst the civilian population not actively immunised against these diseases, is an equal triumph for preventive medicine, and is a complete justification for the labour and expense entailed in safeguarding the food and water supplies of the people, in providing modern methods of sanitation, and in maintaining a skilled medical service which is ready to take immediate action on the first appearance of the disease with a view to tracing its origin and preventing its spread.

Information as to the incidence of typhoid (and paratyphoid) during 1925 in each of the sanitary districts in Middlesex is given on the table on pages 62 and 63, but the

following summary for the County as a whole shows in a concise form the decrease referred to above :—

Year.	Cases.	Deaths.	Case-rate per 1,000 living.	Death-rate per 1,000 living.
Average—				
1901–1905	399	68	0·47	0·080
1906–1910	238	39	0·23	0·038
1911–1915	136	26	0·11	0·021
1915–1920	100	16	0·09	0·013
1920–1925	69	10	0·06	0·008

County and District Rates, 1925.

Scarlet Fever, Diphtheria, Enteric Fever.

—	Number of cases notified, with case-rate per 1,000 living. Number of deaths recorded, with death-rate per 1,000 living.											
	Scarlet Fever.				Diphtheria.				Enteric Fever.			
	Cases Notified.		Deaths Recorded.		Cases Notified.		Deaths Recorded.		Cases Notified.		Deaths Recorded.	
	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.
Urban Districts—												
Acton (*Borough*)	82	1·30	1	0·02	64	1·01	1	0·02	5	0·08	1	0·02
Brentford	22	1·24	—	—	41	2·32	1	0·06	1	0·06	—	—
Chiswick	16	0·40	—	—	32	0·79	2	0·05	2	0·05	—	—
Ealing (*Borough*)	107	1·56	1	0·01	38	0·56	4	0·06	5	0·07	1	0·01
Edmonton	112	1·57	—	—	208	2·92	27	0·38	2	0·03	—	—
Enfield	94	1·47	—	—	140	2·20	17	0·27	1	0·02	1	0·02
Feltham	28	4·03	—	—	14	2·02	2	0·29	—	—	—	—
Finchley	90	1·86	—	—	79	1·63	6	0·12	2	0·04	1	0·02
Friern Barnet	24	1·29	—	—	23	1·24	—	—	5	0·27	—	—
Greenford	2	1·24	—	—	3	1·86	—	—	—	—	—	—
Hampton	32	2·93	1	0·09	21	1·92	1	0·09	2	0·18	—	—
Hampton Wick	7	2·30	—	—	18	5·92	1	0·33	1	0·33	—	—
Hanwell	29	1·38	—	—	9	0·43	—	—	4	0·19	—	—

Harrow	36	1·72	—	—	9	0·43	—	—	—	—	—	—
Hayes	5	0·56	1	0·11	7	0·79	—	—	—	—	—	—
Hendon	136	2·30	1	0·02	115	1·94	3	0·05	12	0·20	3	0·05
Heston & Isleworth	85	1·76	2	0·04	74	1·53	8	0·17	—	—	—	—
Hornsey (*Borough*)	122	1·40	—	—	53	0·61	1	0·01	9	0·10	—	—
Kingsbury	4	1·74	—	—	1	0·43	—	—	—	—	—	—
Ruislip-Northwood	18	1·75	—	—	1	0·10	—	—	—	—	—	—
Southall-Norwood	59	1·83	—	—	11	0·34	—	—	2	0·06	—	—
Southgate	69	1·73	—	—	21	0·53	2	0·05	2	0·05	—	—
Staines	17	2·26	—	—	6	0·80	1	0·13	1	0·13	—	—
Sunbury	4	0·68	—	—	—	—	—	—	1	0·17	—	—
Teddington	30	1·37	—	—	43	1·97	5	0·23	1	0·05	—	—
Tottenham	428	2·79	—	—	248	1·61	9	0·06	2	0·01	2	0·01
Twickenham	36	1·02	—	—	37	1·05	4	0·11	3	0·09	—	—
Uxbridge	15	1·25	—	—	4	0·33	—	—	—	—	—	—
Wealdstone	28	2·00	—	—	20	1·43	—	—	—	—	—	—
Wembley	39	1·92	1	0·05	12	0·59	—	—	1	0·05	—	—
Willesden	264	1·56	2	0·01	304	1·80	10	0·06	6	0·04	1	0·01
Wood Green	92	1·77	—	—	56	1·08	1	0·02	—	—	—	—
Yiewsley	35	6·25	—	—	5	0·89	—	—	—	—	—	—
Rural Districts.												
Hendon	40	2·05	—	—	15	0·77	1	0·05	1	0·05	—	—
South Mimms	—	—	—	—	—	—	—	—	—	—	—	—
Staines	43	1·62	2	0·08	24	0·90	—	—	1	0·04	—	—
Uxbridge	14	1·14	—	—	7	0·57	1	0·08	2	0·16	—	—
THE COUNTY	2,264	1·74	12	0·01	1,763	1·35	108	0·08	74	0·06	10	0·01

All the above statistics are supplied by the Registrar-General.

Puerperal Fever.—The number of cases notified during the year was 62, equal to a case-rate of 2·9 per 1,000 births; and the number of deaths was 25 or a death-rate of 1·2 per 1,000 births. Particulars as to the number of cases of, and deaths from, puerperal fever during the past five years are shown in the following table :—

Year.	Cases Notified.	Case-rate per 1,000 births.	Deaths.	Death-rate per 1,000 births.
1921	80	3·1	34	1·3
1922	57	2·4	35	1·5
1923	67	2·9	36	1·5
1924	55	2·5	34	1·5
1925	62	2·9	25	1·2

It will be noted that there has been an increase of 7 cases during 1925 as compared with the previous year, but that the number of deaths has decreased by 9. The fatal effect of the condition is shown, however, by the fact that 40 per cent. of the notified cases died.

Of the 62 cases notified 18 occurred in the practices of midwives, *i.e.*, an increase of 2 on the numbers in 1924 and 1923. From the returns received from practising midwives it appears they attended a total of 10,164 births, or, excluding 1,280 births attended by midwives residing just outside the boundary and practising both within and without the County, a net total of 8,884. On the last-mentioned figure the case-rate in the practices of midwives is 2·0 per 1,000 births.

Amongst midwives' cases 5 died, equal to a mortality rate of 0·56 per 1,000 births attended by midwives.

With respect to the distribution of puerperal fever amongst the sanitary districts in the County, the four districts in which the most notifications were received were Willesden, 16; Ealing, 6; Tottenham, 5; Acton, 4. It is doubtful, however, if any useful conclusion can be drawn from these figures, as the whole question of puerperal fever notification is one of difficulty, and various committees considering the subject have been forced to the conclusion

that the practice of doctors with regard to notification is far from uniform. Further references to puerperal fever appear under the headings Maternal Mortality, page 19, and Administration of the Midwives Acts, pages 156 *et seq.*

Ophthalmia Neonatorum.—The number of cases notified in 1925 was 104, equal to a case-rate of 4·83 per 1,000 births. These figures are higher than those for last year, viz., 82 cases and a case-rate of 3·73 per 1,000 births, and for 1923, viz., 80 cases and a case-rate of 3·45 per 1,000 births, the last-mentioned year having the lowest number of notifications since the condition became compulsorily notifiable in 1914.

Of the 104 cases, 47 occurred among infants whose births had been attended by midwives. Information relating to the after-results of the treatment of midwives' cases will be found in the section of the Report dealing with the administration of the Midwives Acts.

The highest number of cases was recorded in the district of Willesden, viz., 37, or more than one-third of the total of the County.

During the last five years the notifications and case-rates per 1,000 births have been as follows :—

Year.	Cases.	Rate per 1,000 Births.	Year.	Cases.	Rate per 1,000 Births.
1921	139	5·55	1924	82	3·73
1922	131	5·51	1925	104	4·83
1923	80	3·45			

Measles.—As has been indicated in previous reports, this disease tends to become prevalent at intervals of about two years. Accordingly, as 1924 was a year marked by a considerable number of deaths from measles, a low death-rate during 1925 was to be anticipated. The experience of the year has confirmed this expectation, and the number of deaths recorded in 1925 was 27 as against 191 the previous year. All the deaths occurred in children under 15 years of age, and 17 of the deaths took place in the Urban District of Willesden.

The following table illustrates the biennial fluctuation in the prevalence of measles, and also shows the number of deaths for the County during the past 10 years :—

Year.	Deaths.	Year.	Deaths.
1916 ...	118	1921 ...	14
1917 ...	258	1922 ...	130
1918 ...	182	1923 ...	35
1919 ...	53	1924 ...	191
1920 ...	112	1925 ...	27

Cerebro-Spinal Fever.—Twelve cases were notified during 1925. The number of notifications during each year since the disease became notifiable in September, 1912, has been as follows :—1913, 7 ; 1914, 8 ; 1915, 115 ; 1916, 53 ; 1917, 54 ; 1918, 19 ; 1919, 33 ; 1920, 23 ; 1921, 9 ; 1922, 15 ; 1923, 11 ; 1924, 12 ; 1925, 12.

Encephalitis Lethargica.—The notifications of this disease, which was made compulsorily notifiable on 1st January, 1919, are set out below :—

——	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.
1919	12	4	2	10	28
1920	13	9	5	17	44
1921	37	13	—	3	53
1922	6	8	7	9	30
1923	12	6	7	6	31
1924	11	97	29	25	162
1925	34	31	16	29	110

Although the total for 1925 shows a satisfactory decrease compared with the previous year, when there was an unusually high incidence, it is much larger than the average

maintained during the five preceding years. Of the 110 cases, 17 occurred in the district of Heston and Isleworth, and a like number in Tottenham.

The number of deaths for the year attributable to encephalitis lethargica was 40, as against 45 in 1924.

Acute Polioencephalitis.—This disease is of infrequent occurrence. One case only was notified during 1925. The number of cases notified in each of the previous four years was 5 cases in 1924, none in 1923, 2 in 1922 and 1 in 1921.

Acute Poliomyelitis.—The number of notifications in 1925 and in each of the previous four years was 11 cases in 1925, 28 cases in 1924, 24 cases in 1923, 6 cases in 1922 and 18 cases in 1921.

Pneumonia.—Six cases of influenzal pneumonia and 1,418 cases of primary pneumonia were notified during the year. Of the latter 507 were notified during the first quarter of the year, 266 in the second, 137 in the third, and 508 in the fourth quarters.

The following table affords information as to the notifications of, and deaths from, pneumonia during the past five years :—

Year.	Notifications.			Deaths from all forms.	Death-rate per 1,000 persons living.	Case mortality rate.
	Influenzal pneumonia.	Primary pneumonia.	Total.			
						Per cent.
1921	14	818	832	910	0·72	109·4
1922	32	1,488	1,520	1,056	0·83	69·5
1923	3	991	994	825	0·65	83·0
1924	5	1,576	1,581	1,008	0·78	63·8
1925	6	1,418	1,424	880	0·68	61·8

Based upon the number of notifications received, the case mortality rate of pneumonia appears very high, but although pneumonia is a serious disease, the rates shown above are unduly high, for it must be remembered all forms of pneumonia are not notifiable, although deaths from all forms are included in the total deaths; moreover, it is certain that the notification of forms which are notifiable is not complete. For these reasons case mortality rates based upon information at present available are fallacious and of very limited value.

Of the cases of primary pneumonia recorded during the year, 356 were notified in the District of Willesden, 183 in Tottenham, 79 in the Borough of Ealing, 69 in the District of Heston-Isleworth, and 63 in Enfield.

Dysentery and Malaria.—The incidence of these diseases is low, and no localised outbreaks took place during the year. The following table shows the number of notifications of these diseases since they became compulsorily notifiable in 1919, and indicates in a clear manner the prevalence of the conditions consequent upon the return from foreign service of infected soldiers at the close of the war, and the great diminution in prevalence which has occurred since this cause ceased to operate.

Year.	Malaria.	Dysentry.
	Cases.	Cases.
1919	469	171
1920	211	103
1921	33	64
1922	21	44
1923	13	11
1924	9	11
1925	10	8

Erysipelas.—395 cases of this condition were notified during 1925, as compared with 386 in 1924, 326 in 1923, 390 in 1922, and 461 in 1921.

Cholera, Plague, Relapsing Fever, Continued Fever, Trench Fever and Typhus.—No cases of any of these diseases have been notified during the past five years.

Isolation Hospital Accommodation.

The provision of hospital accommodation for the isolation of the ordinary infectious diseases and of smallpox rests with the local sanitary authorities. The adequacy of this provision, however, has an important bearing upon the health of the inhabitants, and the following summary, based upon information supplied by local medical officers of health, affords an opportunity of estimating the extent to which the County as a whole is in a position to meet its requirements in this respect.

(A.) Hospitals for Ordinary Infectious Diseases,

District. Acreage of site, and if area for further extension.	Whether buildings consist of permanent brick structures or temporary structures.	Number of separate ward pavilions, wards and accommodation in each. Diseases for which used.
Acton.—4 acres. Room for extension.	Permanent; 1 pavilion erected of ferro-concrete.	4 pavilions—(*a*) 36 beds, scarlet fever; (*b*) 14 beds, scarlet fever; (*c*) 14 beds, diphtheria; (*d*) observation ward of 3 rooms, with accommodation for 3, 3, and 1 beds respectively; used for observation and purposes enteric fever patients.
Brentford.—Area of site about 1¼ acres. There is room for further extension.	One permanent brick structure with slated roof, and one large corrugated iron building.	(1) Brick building contains 3 wards capable of accommodating 18 beds and 10 cots. (2) Corrugated iron building contains 1 large and 2 small wards capable of accommodating 22 beds and 4 cots.
Chiswick .... *Ealing.*—About 3 acres	.... Permanent brick structures.	.... 2 pavilions containing 54 beds for scarlet fever; each pavilion contains 2 large and 2 small wards. There are 2 playrooms upstairs which can accommodate 20 beds in addition. 1 pavilion for enteric fever and diphtheria, containing 5 wards, including the old kitchen with a total of 15 beds. 1 pavilion of 11 beds (2 wards) used for diphtheria when needed.
Edmonton and Enfield Joint Hospital.—27 acres. Plenty of room for extension.	Brick buildings except Block V, Block VI, and bungalow sewing room, which are of galvanized iron and wood.	The hospital contains 163 beds, as follows:—Block I, 2 beds—observation; Block II, 26 beds—scarlet fever; Block III, 26 beds—scarlet fever; Block IV, 26 beds—scarlet fever; Block V, 18 beds—scarlet fever; Block VI, 13 beds—diphtheria; Block VII, 26 beds—diphtheria; Block VIII, 14 beds—enteric fever; Block IX, 12 beds—cubicles.

VIZ., SCARLET FEVER, DIPHTHERIA AND TYPHOID FEVER.

Whether separate administration block. Accommodation for staff.	Outbuildings. Form of disinfecting apparatus.	Remarks and whether cases are admitted from outside districts.
Yes. In the administrative block there is accommodation for 9 nurses and 4 maids. A cottage has been rented close to the hospital which has accommodation for 6 nurses and 4 maids.	Brick laundry, ambulance shed, disinfector and mortuary buildings. No porter's lodge. Manlove, Alliott's steam disinfecting apparatus.	Cases admitted by agreement from Wembley.
Yes. Accommodation for matron, 5 nurses and 3 maids.	Separate brick buildings for laundry, Goddard, Massey and Warner steam disinfector, motor ambulance and discharge block. Corrugated iron building for mortuary. Ambulance building erected in 1925.	Yes; in cases of emergency and epidemics patients have been admitted on application of Guardians and neighbouring districts.
....	....	See *Ealing*.
Separate administrative block and nurses' home containing dining-rooms, matron's sitting-room, dispensary, housemaid's pantry, kitchen, scullery and larders, matron's bedroom, 26 bedrooms for staff, and 5 bathrooms.	Laundry and disinfecting block; ambulance and mortuary block; porter's lodge containing 2 rooms, scullery and bath for porter. Thresh's steam disinfector.	The hospital is under the control of the Chiswick and Ealing Hospitals Committee and receives patients from the districts of Chiswick, Ealing, Hanwell and Greenford.
Yes. 1 bedroom, R.M.O.; 42 bedrooms for 53 staff; nurses' and matron's dining-rooms, sitting-rooms for R.M.O., matron, assistant matron, sisters, nurses, servants; board-room, telephone-room, linen-room, bungalow for sewing, and 2 stores.	Laundry and disinfecting station, mortuary, bacteriological laboratory, porter's lodge, discharge block, engineer's cottage —brick; bungalow— galvanised iron and wood. Thresh's steam disinfector.	Yes, at 7*s*. per day.

District. Acreage of site and if area for further extension.	Whether buildings consist of permanent brick structures or temporary structures.	Number of separate ward pavilions, wards and accommodation in each. Diseases for which used.
Feltham	....	....
Finchley	....	....
Frien Barnet	....	....
Greenford	....	....
Hampton.—7 acres, 2¾ acres at present in use.	Permanent brick structures.	1 pavilion block of 1 four-bedded and 3 two-bedded wards, with 2 kitchens, 2 bathrooms and lavatory accommodation (2 wards for scarlet fever and 2 for diphtheria), 1 block of 4 observation wards with lavatory accommodation.
Hampton Wick	....	....
Hanwell	....	....
Harrow. — Nearly 1½ acres. No room for further extension. Sewage farm adjoins hospital.	Permanent brick buildings.	2 separate ward pavilions. 2 wards for scarlet fever cases. Accommodation, 10 and 5 patients respectively. 2 wards for diphtheria or typhoid cases. Accommodation, 6 and 3 cases respectively.
	1 semi-permanent building.	Emergency wards, 2 separate ward pavilions, 6 and 3 beds, and 2 single-bed wards.
Hayes	....	....
Hendon.—The present temporary hospital occupies a site of ¾ acre.	Temporary corrugated iron and wood.	3 pavilions—1 containing 3 wards and small observation room for scarlet fever, 20 beds; 1 containing 2 wards and one small observation room for diphtheria, 11 beds; 1 containing 10 beds for either disease.
Heston and Isleworth—	Permanent brick structures.	4 pavilions—42 beds, for scarlet fever, 14 beds for diphtheria, and 5 observations beds.

Whether separate administration block. Accommodation for staff.	Outbuildings. Form of disinfecting apparatus.	Remarks, and whether cases are admitted from outside districts.
....	....	See *Staines Rural.* Staines Joint Hospital.
....	....	See *Hornsey.*
....	....	See *Southgate.*
....	....	See *Ealing.*
Yes. 5 bedrooms, bathroom, dining-room, sitting-room, office, kitchen and scullery.	Laundry and disinfecting rooms, mortuary, ambulance house, porter's lodge with discharging wards attached. Washington-Lyon's steam disinfector.	Patients are admitted from Kingston and occasionally from Teddington and Hampton Wick, at the discretion of the medical superintendent.
....	....	See *Hampton.* Nearly all cases are sent to Tolworth Joint Hospital, Surrey.
....	....	See *Ealing.*
Yes. Matron's room, nurses' room, servants' room, 1 matron's bedroom, 3 nurses' bedrooms, 2 servants' bedrooms and general offices.	Laundry, ambulance shed, mortuary, disinfecting station and "discharge" block. Thresh's saturated steam disinfector.	Cases occasionally admitted from other districts.
....	....	See *Uxbridge Rural.* Uxbridge Joint Hospital Board.
No separate administration block but 2 bungalows containing matron's sitting-room and beds for staff (13).	Laundry, ambulance shed and mortuary attached. Washington-Lyon apparatus.	Cases admitted occasionally from other districts. See notes at end of table.
Yes. Matron's sitting-room and bedroom; nurses' dining-room and 8 bedrooms, 4 maids' bedrooms.	Laundry, mortuary, ambulance shed.	Joint Hospital of the Borough of Richmond and the U.D. of Heston and Isleworth.

District. Acreage of site and if area for further extension.	Whether buildings consist of permanent brick structures or temporary structures.	Number of separate ward pavilions, wards and accommodation in each. Diseases for which used.
Hornsey.—9½ acres.	Permanent brick buildings.	5 pavilions, 12 wards, 103 beds. Diseases treated: — Scarlet fever and diphtheria. Also typhoid fever, measles and other infectious diseases, if accommodation is available.
Kingsbury	....	....
Ruislip-Northwood	....	....
Southall-Norwood.— About 3 acres. Plenty of room on site for further extension.	Permanent brick buildings.	2 blocks of 2 wards each— (*a*) Pavilion block, 2 large wards, and an emergency ward—scarlet fever (16 beds); (*b*) Isolation block, 2 small wards containing 8 beds—diphtheria. Additional accommodation used for convalescent patients is provided in a circular Berthon hospital at rear of pavilion block.
Southgate.—9 acres. Room for further extension.	Permanent brick buildings.	(*a*) Pavilion with 2 wards, 10 beds—scarlet fever; (*b*) Pavilion with 2 wards, 12 beds—scarlet fever; (*c*) Isolation pavilion, 4 wards in all, each containing 2 beds. Used for diphtheria and typhoid fever, etc.
Staines	....	....
Sunbury	....	....
Teddington	....	....
Tottenham	....	....

Whether separate administration block. Accommodation for staff.	Outbuildings. Form of disinfecting apparatus.	Remarks, and whether cases are admitted from outside districts.
Yes. Accommodation for matron, 24 sisters and nurses, 13 servants, 4 laundrymaids and 1 resident medical officer.	Laundry and disinfecting chamber, mortuary, stables and coach-house for ambulances, and coachman's cottage. Steam disinfector.	The hospital is now owned by the three districts of Hornsey, Finchley and Wood Green, and is controlled by a Joint Committee of the three districts. See notes at end of table.
....	....	Cases, when they occur, can always be sent to the hospitals of adjoining districts.
....	....	See *Uxbridge Rural.* Uxbridge Joint Hospital.
Separate administration block. Matron's sitting-room, nurses' sitting-room, dispensary and usual offices on ground floor, 4 bedrooms and lavatory accommodation on first floor; 2 bedrooms on second floor.	Laundry, ambulance, mortuary and disinfecting rooms; also porter's lodge and discharge block. Thresh's current steam disinfector.	Cases are not admitted from other districts.
Yes. Dining-room, nurses' sitting-room, matron's sitting-room, 2 bathrooms and 19 bedrooms.	Laundry, ambulance and mortuary block, porter's lodge. Steam.	By agreement, 12 beds are available for the use of Friern Barnet. Cases admitted from other districts if accommodation available.
....	....	See *Staines Rural.* Staines Joint Hospital.
....	....	Ditto.
....	....	See *Hampton.* Most cases are sent to Tolworth Joint Hospital or Molesey Hospital, Surrey.
....	....	Cases are sent to the hospitals of the Metropolitan Asylums Board.

District. Acreage of site and if area for further extension.	Whether buildings consist of permanent brick structures or temporary structures.	Number of separate ward pavilions, wards, and accommodation in each. Diseases for which used.
Twickenham.—8 acres. Room for further extension.	Permanent brick buildings.	1 ward pavilion—2 wards, with a side ward off each; accommodation, 16 beds. 1 day-room upstairs has been converted into a ward for diphtheria, 4 beds. 1 block, 2 wards, 6 beds for convalescent scarlet fever patients.
Uxbridge....	....	....
Wealdstone	....	....
Wembley	....	....
Willesden	Permanent brick-built structures with two iron buildings.	Block. A.—Administration. Wards Beds. B .... 4 10 Enteric, &c. C .... 2 16 Diphtheria. D .... 2 28 ,, E .... 2 16 Scarlet fever F & G 2 40 ,, H & H_1 4 12 Observation. Total 122 beds.
Wood Green	....	....
Yiewsley	....	....
Hendon (Rural).—Just over 3 acres.	Permanent brick buildings.	2 blocks for scarlet fever and diphtheria respectively, with 2 observation wards. Total accommodation, 26 beds and cots.
South Mimms Rural	....	....
Staines Rural—Staines Joint Hospital.—7 acres, of which 4 acres are in use and 3 acres are available for further extension.	Permanent brick buildings.	2 pavilions, each containing 2 wards of 8 and 6 beds each, and 2 single-bedded private wards. 1 observation block on cubicle system, 4 beds. Total number of beds, 36. Diphtheria and scarlet fever.

Whether separate administration block. Accommodation for staff.	Outbuildings. Form of disinfecting apparatus.	Remarks and whether cases are admitted from outside districts.
Yes. 7 bedrooms, nurses' sitting-room, matron's sitting-room and office for medical superintendent.	Outbuildings comprise laundry, ambulance shed, and mortuary. No porter's lodge.	Cases are not ordinarily admitted from other districts.
....	....	See *Uxbridge* Rural. Uxbridge Joint Hospital.
....	....	Cases sent to the hospital of *Hendon Rural District* or to Metropolitan Asylums Board hospitals.
Yes. Medical staff quarters, matron's quarters, nurses' sitting-rooms and bedrooms, kitchen and other offices.	Discharge block, dispensary, laundry, garage, motor accessory store, workshop, office and telephone room.	See *Acton.* Cases are received from other districts when accommodation permits, and are charged for in accordance with the rate in force for the time being.
....	....	*See Hornsey.*
....	....	See *Uxbridge Rural*, Uxbridge Joint Hospital.
Yes. Matron's quarters, nurses' sitting-room and bedrooms, servants' bedrooms, kitchen and scullery.	Ambulance shed, laundry, mortuary and disinfecting block. High pressure steam disinfector.	Cases taken from Wealdstone by arrangement.
....	....	Cases are sent to the Barnet Hospital.
Yes. Accommodation for matron and 9 nurses, also for necessary servants.	Laundry, disinfecting station, mortuary, ambulance shed, &c., porter's lodge and discharge block. Manlove, Alliott and Co.'s steam disinfector.	The Joint Hospital is provided by the following districts :— Staines (Rural). Staines (Urban). Sunbury. Feltham.

District. Acreage of site and if area for further extension.	Whether buildings consist of permanent brick structures or temporary structures.	Number of separate ward pavilions, wards and accommodation in each. Diseases for which used.
Uxbridge Rural—Uxbridge Joint Hospital.—About 3 acres. No room for further extension.	All buildings permanent brick except one, which is made of wood and iron, and at present used for diphtheria patients.	3 pavilion blocks :—50 scarlet fever beds and cots; 20 diphtheria beds and cots; 10 enteric beds and cots.

Whether separate administration block. Accommodation for staff.	Outbuildings. Form of disinfecting apparatus.	Remarks, and whether cases are admitted from outside districts.
Yes. 17 nurses' and staff bedrooms, 3 sitting rooms for matron, nurses and staff, 1 dining-room, 1 surgery, 1 sewing-room, 1 kitchen, 3 bathrooms, and usual offices.	Laundry, ambulance-shed, mortuary, discharge block, and porter's lodge. Washington Lyon's steam disinfector.	On emergencies patients from outside districts may be admitted with the approval of the Chairman and Medical Officer.

NOTES.

Hendon Urban.—A scheme has been adopted for the provision of a new hospital on a different site of 10 acres. The scheme has not yet received the sanction of the Ministry of Health.

Hornsey.—Additions to the Hornsey, Finchley and Wood Green Joint Hospital are now in course of erection, and include a cruciform block containing 20 cubicle wards and a nurses' home containing public rooms and 39 bedrooms. An entrance lodge is also being built.

From the foregoing statement it will be seen that in all districts in the County some arrangement exists for the isolation of patients suffering from the common infectious diseases. The nature and adequacy of this provision, however, varies enormously in the several districts. Whilst, on the one hand, 10 districts have established, or maintain jointly with other districts, hospitals of 100 beds or over, no less than 11 districts have separate or joint hospitals of 40 beds or less, 10 districts, have hospitals which come between these two extremes, and 6 districts have to rely on the chances of obtaining beds at institutions over which they have no control. In all some 16 isolation hospitals exist in the County (other than hospitals for the reception of London patients and belonging to the Metropolitan Asylums Board); the total accommodation of these hospitals is given as 980 beds, equal to 1 bed per 1,333 of the population as a whole, but information is not available as to whether this number is based upon the cubic feet of space allowed for each patient approved by the Ministry of Health, *i.e.*, 1,872 cubic feet per patient.

It cannot be maintained that the existing provision is entirely satisfactory, or that the maintenance of so many small hospitals is in the interests of economy or for the benefit of the patients.

(*b*) *Hospitals for Smallpox.*

The extreme importance of sufficient and immediately available accommodation for the isolation of cases of smallpox has been mentioned in the section of this Report dealing with infectious diseases (page 57), and no apology is needed for dwelling on the subject. The risk of the introduction of infection is urgent, and the position of the County with regard to isolation facilities is not above criticism.

It is very difficult to arrive at an accurate estimate of the amount of accommodation which should be provided, as in the case of a serious epidemic an almost unlimited number of beds may be needed; on the other hand, to establish and maintain a large institution which may never be required involves an apparently useless expenditure. The provision, however, is in the nature of an insurance,

and the character of the danger from which it affords a measure of security more than justifies the expense. Having in mind the above considerations, accommodation at the rate of 1 bed for every 3,000 of the population would appear to be a reasonable provision so long as the site is capable of accommodating temporary extensions for larger numbers and the administrative quarters can house the increased staff which would be needed.

As will be seen below, the total existing accommodation for Middlesex residents is stated to be 345 beds, but this is not calculated on the basis of 2,000 cubic feet for each patient, which is the minimum allowance approved by the Ministry of Health. On the latter basis the existing provision would not accommodate more than about 200 patients, and a certain amount of structural alteration would be required before even this number could be dealt with.

The facilities for the isolation of cases of smallpox as they affect each district in the County are as follows :—

Middlesex Districts Joint Smallpox Hospital Board.—Twenty-six districts are included in this body ; these are the Borough of Acton, the Urban Districts of Brentford, Chiswick, Edmonton, Enfield, Feltham, Finchley, Friern Barnet, Greenford, Hampton, Hampton Wick, Hanwell, Harrow, Hendon, Kingsbury, Southgate, Staines, Sunbury, Teddington, Tottenham, Wealdstone, Wembley, Wood Green, and the Rural Districts of Hendon, South Mimms and Staines.

The Board's Hospital is Clare Hall, South Mimms, and is stated to have accommodation for 250 patients (on the basis of 2,000 cubic feet per patient, accommodation = 150).

Uxbridge Joint Hospital Board.—Five districts are included ; these are the Urban Districts of Hayes, Ruislip-Northwood, Uxbridge, and Yiewsley, and the Rural District of Uxbridge.

The Board's Hospital is at Yeading, and is stated to have accommodation for 48 patients (on the basis of 2,000 cubic feet per patient, accommodation = 24).

Four districts have separate accommodation or arrangements, viz., Ealing, 12 beds ; Heston and Isleworth, 13 beds jointly with Richmond (Surrey) ; Hornsey, arrangement made with Uxbridge Joint Hospital for use of 10 beds

Willesden, The District Council's Smallpox Hospital, Kingsbury, would accommodate a limited number of cases if necessary, and the Ministry of Health have approved plans for a new smallpox hospital on the Kingsbury site with accommodation for 32 patients.

One district has accommodation which is reported to be unsuitable, viz., Twickenham.

One district has no provision, viz., Southall-Norwood.

Tuberculosis.

Under the Public Health (Tuberculosis) Regulations, 1912, which make it compulsory for every medical practitioner to notify to the local sanitary authority all cases of tuberculosis, both pulmonary and non-pulmonary, it was provided that each local medical officer of health should furnish to the County Medical Officer a weekly return, giving full particulars of each notification. A summary of these notifications, divided into males and females, pulmonary and non-pulmonary forms of the disease, and various specified age groups, has to be prepared annually by the County Medical Officer and forwarded to the Ministry of Health.

These Regulations have been supplemented by the Public Health (Tuberculosis) Regulations, 1924, and in the circular accompanying the latter Regulations local medical officers of health are required to include on their returns, specially marked, particulars of all new cases which have come to their knowledge in other ways than by notification, *e.g.*, from death returns, &c.

Owing to the close co-operation obtaining between the County tuberculosis officers and local medical officers of health (see page 114), fairly accurate information as to the total number of new cases arising each year is now available. During 1925 the total number of new cases of tuberculosis reported by local medical officers of health was 2,076, and of this number 1,994 (or 96 per cent.), were included in the weekly returns under the 1912 Regulations as being formally notified by medical practitioners, 3 (or 0·1 per cent.), unnotified cases were reported by school medical officers, and 79 (or 3·8 per cent.) unnotified cases came to

the knowledge of the medical officers in other ways. The following table gives information of these 2,076 new cases under the subdivisions mentioned above, together with information supplied by the Registrar-General as to the number of deaths from tuberculosis, also subdivided in the same manner and grouped into age groups as nearly comparable as possible :—

New Cases and Mortality during 1925.

Age Periods.	New Cases* (notified and non-notified).				Deaths.†			
	Pulmonary.		Non-Pulmonary.		Respiratory.		Other.	
	M.	F.	M.	F.	M.	F.	M.	F.
0	5	2	5	4	1	—	12	4
1	12	13	36	28	3	2	25	18
5	46	32	40	37	10	16	18	10
10	47	49	29	24				
15	85	99	19	21	86	115	19	15
20	134	126	21	23				
25	240	223	20	27	239	174	20	14
35	129	140	16	8				
45	109	90	4	3	176	68	9	4
55	49	30	7	4				
65 and upwards	23	17	—	—	25	7	3	4
Totals	879	821	197	179	540	382	106	69

Whilst the foregoing table is of considerable interest, and in future years returns under the Regulations should afford valuable data on which comparisons may be based,

* These figures are summarised from the weekly returns received from the medical officers of health of each district and mentioned in the preceding paragraph, and include notified and non-notified cases.

† Statistics supplied by the Registrar-General.

at the present it is necessary to utilise, for comparative purposes, information obtained from sources similar to those which have been available in previous years.

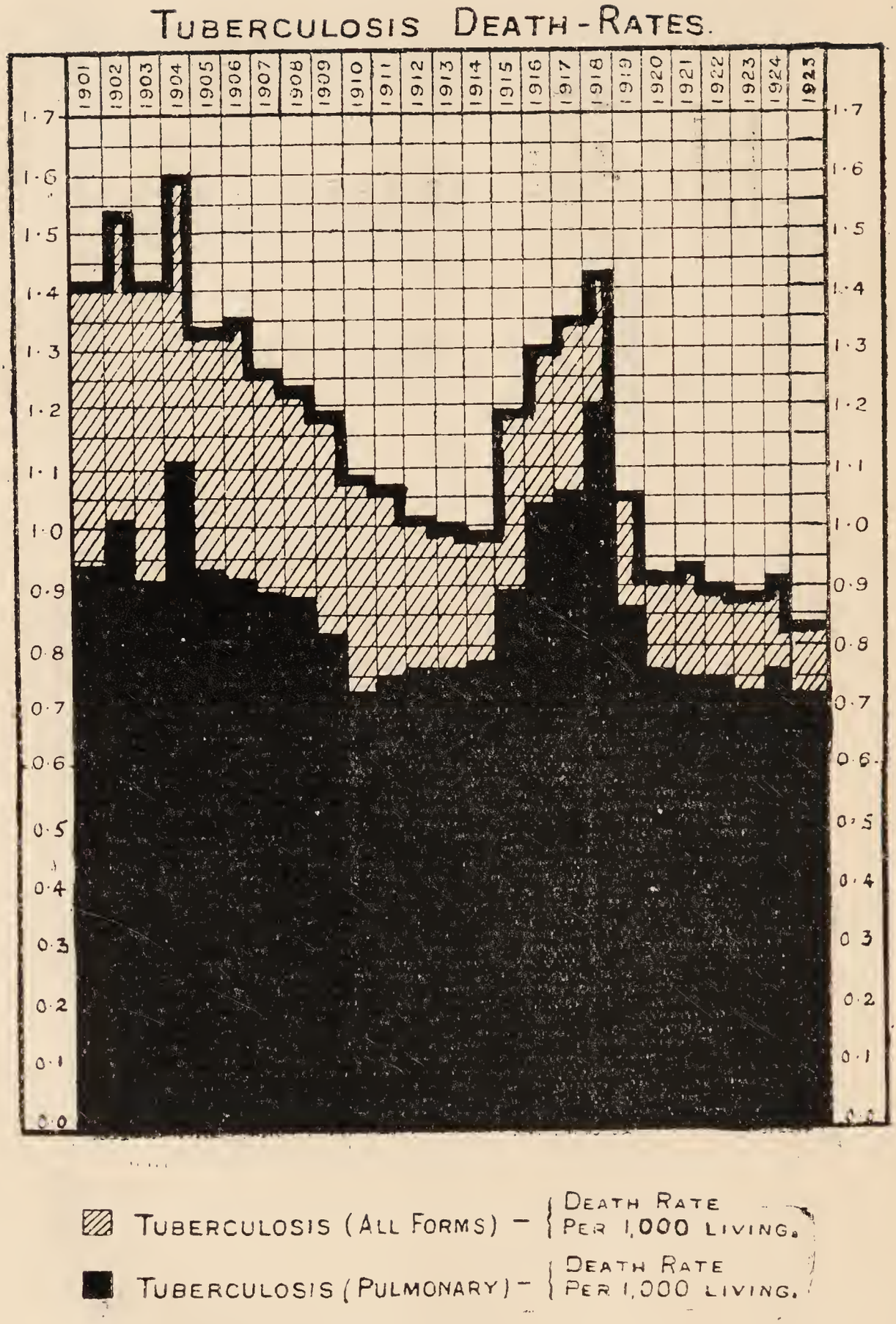
Each week local medical officers of health send to the Registrar-General a return of the numbers of notifications of each notifiable disease (including tuberculosis) received during the week. Based upon these returns the number of cases notified during 1925 was 1,983 (*i.e.*, a discrepancy of 11 as compared with the numbers included in the preceding table). This slight discrepancy does not affect the incidence rate per 1,000 persons living, which on either total is equivalent to 1·52, a very slight reduction on the rate for the previous year. It was suggested in last year's Report that the increase in the rate of notifications per 1,000 persons experienced in 1923 and 1924, as compared with 1921 and 1922, if due to an actual increase in the prevalence of the disease, rather than to more complete notification, should be reflected in an increased death-rate from tuberculosis in 1923 and succeeding years. Fortunately this year's death rate does not afford any support to the suggestion that tuberculosis is becoming more common, and the rate of mortality in the County due to all forms of tuberculosis, viz., 0·84 per 1,000 persons living, is the lowest on record during the present century.

The following table shows the numbers and rates per 1,000 living of notifications of, and deaths from, tuberculosis for the past 10 years, whilst the chart on page 86 shows, in graphic form, the systematic fall in the death-rate from tuberculosis since 1901, and the effect of the abnormal conditions obtaining during the Great War :—

TUBERCULOSIS (NOTIFICATIONS AND DEATHS FOR PAST 10 YEARS).

	Tuberculosis of Respiratory System.				All Forms of Tuberculosis.			
	Number of Notifications.	Rate per 1,000 living.	Number of Deaths.	Death-rate per 1,000 living.	Number of Notifications.	Rate per 1,000 living.	Number of Deaths.	Death-rate per 1,000 living.
1916 ...	1,894	1·62	1,203	1·03	2,431	2·08	1,520	1·30
1917 ...	1,930	1·68	1,216	1·05	2,474	2·15	1,553	1·35
1918 ...	2,218	1·93	1,386	1·20	2,621	2·28	1,642	1·43
1919 ...	2,150	1·75	1,013	0·86	2,577	2·19	1,236	1·05
1920 ...	1,887	1·48	974	0·76	2,218	1·74	1,178	0·92
1921 ...	1,604	1·27	944	0·75	1,931	1·53	1,180	0·94
1922 ...	1,529	1·21	948	0·75	1,823	1·44	1,142	0·90
1923 ...	1,565	1·23	916	0·72	1,944	1·52	1,120	0·88
1924 ...	1,635	1·27	986	0·76	1,982	1·54	1,188	0·92
1925 ...	1,632*	1·25	922	0·71	1,983*	1·52	1,097	0·84

* These figures are obtained from the weekly notifications of the district medical officers of health in the County. All the remaining statistics are furnished by the Registrar-General.


TUBERCULOSIS DEATH-RATES.
1901
1902
1903
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914
1915
1916
1917
1918
1919
1920
1921
1922
1923
1924
1925
1·7
1·6
1·5
1·4
1·3
1·2
1·1
1·0
0·9
0·8
0·7
0·6
0·5
0·4
0·3
0·2
0·1
0·0
TUBERCULOSIS (ALL FORMS) — DEATH RATE PER 1,000 LIVING.
TUBERCULOSIS (PULMONARY) — DEATH RATE PER 1,000 LIVING.

As previously mentioned, very close co-operation is maintained between the officers of the County Council and local medical officers of health, *i.e.*, between the officers of the authority responsible for the treatment of tuberculosis and the officers of the responsible authorities under the various tuberculosis notification regulations. In order to avoid duplication of effort the County Council is prepared to undertake the carrying out of the visiting of notified cases required by the Regulations of 1912, and to supply to the local medical officer of health such information with regard to environmental conditions as he may desire. By voluntary arrangement this system obtains in a number of districts in Middlesex; in some cases special environmental cards provided by district councils are filled in by the County Council's tuberculosis dispensary nurses and transmitted by the tuberculosis officers to the local medical officers of health, and in other cases a copy of the environmental form used in connection with the Council's scheme for the treatment of tuberculosis is deemed by the local medical officers to afford all the information they require. The Public Health (Tuberculosis) Regulations, 1924, have resulted in much closer relationship between the County and districts than previously obtained, and a notable increase in the accuracy of the information in the possession of local medical officers of health as to the number of tuberculous persons resident in any district. These Regulations provide for the supply to the County Medical Officer of a Quarterly Return showing the total number of tuberculous persons on the district council's register of notifications, together with detailed information as to any alterations (*i.e.*, removals, deaths, cures, &c.) since the previous quarter. The information thus supplied is passed to the tuberculosis officers, who compare it with their personal knowledge of the patients in the district, and any discrepancy is discussed, additional information furnished, and agreement arrived at, with the result that local registers of tuberculous persons are kept in an up-to-date condition.

The following table gives information with regard to tuberculosis in each sanitary district in the County under these headings :—

(1) Cases notified in 1925.—Information summarised from the weekly returns of notifiable diseases furnished by the local medical officers of health.

(2) Deaths in 1925.—Information supplied by the Registrar-General.

(3) Total number of persons suffering from tuberculosis residing in each district on the 31st December, 1925, showing separately males and females, pulmonary and non-pulmonary disease.—Information obtained from the December Quarterly Returns (under the Regulations, 1924) of local medical officers of health.

	Tuberculosis (all forms).				Cases of tuberculosis remaining on the 31st December, 1925, on the Registers of Notifications kept by Medical Officers of Health of districts in the County.						
	Cases notified, 1925.		Deaths* Recorded.		Pulmonary.			Non-Pulmonary.			Grand Total.
	No.	Rate per 1,000 living.	No.	Rate per 1,000 living.	Males.	Females.	Total.	Males.	Females.	Total.	
Urban—											
Acton (*Borough*)	83	1·32	57	0·90	100	93	193	24	25	49	242
Brentford	32	1·81	22	1·24	49	42	91	13	9	22	113
Chiswick	61	1·51	45	1·11	154	117	271	23	42	65	336
Ealing (*Borough*)	112	1·64	52	0·76	90	94	184	20	28	48	232
Edmonton	122	1·71	77	1·08	370	342	712	140	128	268	980
Enfield	125	1·96	70	1·10	200	144	344	21	25	46	390
Feltham	5	0·72	9	1·30	5	1	6	1	3	4	10
Finchley	55	1·13	23	0·47	62	62	124	15	17	32	156
Friern Barnet	17	0·92	12	0·65	18	32	50	5	4	9	59
Greenford	1	0·62	2	1·24	1	—	1	—	—	—	1
Hampton	4	0·37	6	0·55	10	6	16	13	6	19	35
Hampton Wick	3	0·99	5	1·64	2	1	3	1	2	3	6

* Statistics as to deaths supplied by the Registrar-General. All other statistics obtained from periodical returns from district medical officers of health.

	Tuberculosis (all forms).				Cases of tuberculosis remaining on the 31st December, 1925, on the Registers of Notifications kept by Medical Officers of Health of districts in the County.						
	Cases notified, 1925.		Deaths* Recorded.		Pulmonary.			Non-Pulmonary.			Grand Total.
	No.	Rate per 1,000 living.	No.	Rate per 1,000 living.	Males.	Females.	Total.	Males.	Females.	Total.	
Hanwell	27	1·29	16	0·76	32	25	57	10	5	15	72
Harrow	31	1·48	21	1·00	66	62	128	6	5	11	139
Hayes	16	1·81	4	0·45	9	10	19	5	1	6	25
Hendon	84	1·42	34	0·57	116	84	200	24	37	61	261
Heston & Isleworth	63	1·30	34	0·70	102	85	187	33	36	69	256
Hornsey (*Borough*)	114	1·31	55	0·63	182	168	350	41	34	75	425
Kingsbury	2	0·87	4	1·74	3	—	3	—	—	—	3
Ruislip-Northwood....	6	0·58	6	0·58	16	16	32	4	1	5	37
Southall-Norwood	41	1·27	27	0·84	35	38	73	10	10	20	93
Southgate	65	1·63	25	0·63	66	50	116	15	12	27	143
Staines	6	0·80	7	0·93	5	7	12	2	1	3	15
Sunbury	6	1·02	3	0·51	9	1	10	1	6	7	17
Teddington	35	1·60	21	0·96	20	21	41	12	9	21	62
Tottenham	300	1·95	147	0·96	536	420	956	120	116	236	1,192
Twickenham	57	1·62	37	1·05	55	44	99	12	18	30	129

Uxbridge	14	1·17	9	0·75	16	9	25	5	4	9	34
Wealdstone	17	1·22	8	0·57	23	28	51	4	3	7	58
Wembley	51	2·50	24	1·18	76	65	141	13	18	31	172
Willesden	281	1·66	153	0·91	511	450	961	165	164	329	1,290
Wood Green	73	1·40	45	0·87	375	287	662	83	98	181	843
Yiewsley	7	1·25	6	1·07	13	6	19	4	1	5	24
Rural—											
Hendon	24	1·23	8	0·41	21	20	41	5	3	8	49
South Mimms	2	0·58	2	0·58	†	†	†	†	†	†	†
Staines	20	0·75	11	0·41	9	13	22	1	1	2	24
Uxbridge	21	1·70	10	0·81	4	7	11	4	1	5	16
The County	1,983	1·52	1,097	0·84	3,361	2,850	6,211	855	873	1,728	7,939

* Statistics as to deaths supplied by the Registrar-General. All other statistics obtained from periodical returns from district medical officers of health.

† Returns not received.

Scheme for the Prevention and Treatment of Tuberculosis.

The Council's scheme for dealing with tuberculosis first came into operation in 1913. The basis of the scheme has proved to be sound, and, except for adjustments consequent upon the sanatorium treatment of insured persons ceasing in 1921 to be one of the benefits under the National Insurance Acts, no fundamental alterations in the general plan outlined at the inception have been found to be necessary or desirable. Steady progress, however, has been maintained throughout the period, and a great advance was evidenced in 1921, when the first beds at the County Sanatorium, Harefield, were opened.

The scheme applies to all residents in Middlesex suffering from tuberculosis in any of its forms, and is contributory in nature, inasmuch as patients admitted to institutions, afforded special forms of treatment such as Finsen light, &c., or supplied with surgical appliances, are asked to contribute towards the cost if, as result of enquiry, the financial circumstances of the family justify this course. Attendance at the dispensaries, advice from the tuberculosis officers, the supply of shelters, &c., are free of charge.

The foundation of the scheme is the provision of medical officers with special knowledge of, and experience in, the diagnosis and treatment of tuberculosis. These tuberculosis medical officers are under the control of the County Medical Officer as chief administrative tuberculosis officer, and are employed in the detection, supervision and treatment of cases of tuberculosis, working in intimate relation with local medical officers of health and with medical practitioners in the County.

For the purposes of administration the County has been divided into six areas, each in charge of a tuberculosis medical officer. A head tuberculosis dispensary, and, where necessary to meet the convenience of patients, branch dispensaries, have been established in each area, and are placed under the control of the appropriate tuberculosis officer, who is assisted in his work by whole-time nurses and by a whole-time clerk. Paid resident caretakers have been appointed to look after the head dispensaries, whilst in the case of some of the branch dispensaries,

where the duties are very light, unpaid caretakers are employed, who give their services in return for residence, fuel, light and water.

The total staff engaged in dispensary work is as follows :— 6 tuberculosis medical officers, 12 tuberculosis dispensary nurses, 6 clerks, 6 paid caretakers, and 4 resident unpaid caretakers. It should be added that at one of the dispensaries (Hounslow) provision is made for the accommodation of 16 patients for " observation." Medical supervision is exercised by the tuberculosis officer, who visits the dispensary daily, and a resident staff of 1 sister, 2 nurses, and one domestic servant is employed, whilst the wife of the caretaker holds the appointment of cook, and daily help from a charwoman is obtained as needed. The valuable assistance the beds at Hounslow Dispensary render to the scheme is indicated by the number of patients for whom these are utilised each year. The total admissions during the past five years were as follows :—121 admissions in 1921, 113 in 1922, 164 in 1923, 157 in 1924, and 164 in 1925.

Full information as to the six areas into which the County is divided for dispensary purposes, together with the names of the medical officers and the addresses of the dispensaries in each area is given in the following table :—

Area.	Districts served.	Tuberculosis Medical Officer.	Head Dispensary.	Branch Dispensaries.
1	Edmonton, Enfield	Dr. H. Evans	279, Fore Street, Edmonton.*	—
1A	Tottenham	Dr. S. T. Davies ...	140, West Green Road, Tottenham.	—
2	Finchley, Friern Barnet, Hendon (Urban), Hornsey, Southgate, Wood Green, South Mimms.	Dr. J. R. B. Dobson ...	Chester Villa, High Road, N. Finchley.	10, Alexandra Road, Hornsey ; 158, The Broadway, West Hendon.
3	Harrow, Kingsbury, Ruislip-Northwood, Wealdstone, Wembley, Willesden, Hendon (Rural).	Dr. O. Bruce	3, Priory Park Road, Kilburn.	(Harrow).*
4	Acton, Ealing, Greenford, Hanwell, Hayes, Southall-Norwood, Uxbridge (Urban), Yiewsley, Uxbridge (Rural).	Dr. F. R. B. Atkinson	Green Man Lane, Ealing.	School Clinic, Municipal Offices, Acton ; 156, High Street, Uxbridge.

5	Brentford, Chiswick, Feltham, Hampton, Hampton Wick, Heston & Isleworth, Staines (Urban), Sunbury, Teddington, Twickenham, Staines (Rural).	Dr. E. E. Norton ...	Bell Road, Hounslow.	14, Heathfield Terrace, Chiswick; 12, Thames Street, Staines; 1, Staines Road, Twickenham.

* See appended notes as to Edmonton and Harrow Dispensaries.

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Edmonton Dispensary.—The Council have had under consideration for a considerable time the question of the provision of more suitable premises for the above dispensary.

The condition of 56, Silver Street, Edmonton, is such as to render it unfit for dispensary purposes. Efforts to purchase the freehold, with a view to the premises being put into a proper state of repair, have proved unsuccessful, and the landlord is not prepared to do any repairs. Only the difficulty of finding other suitable accommodation has prevented the termination of the present agreement.

In 1925 an opportunity occurred for the purchase of a house at 279, Fore Street, Edmonton, and as the premises were suitable for dispensary purposes, with the approval of the Ministry of Health, the purchase was effected, and the adaptation of the premises is being carried out.

Harrow Dispensary.—The tenancy of the premises formerly used as a sub-dispensary for the Harrow area was determined by the owners, and the premises were vacated in March, 1923.

Arrangements were made for tuberculosis patients to attend at the head dispensary at Kilburn, and this arrangement is still in force.

Harrow, however, is a large and populous district, which is rapidly being developed, and there is no doubt that the efficiency of the Council's scheme for treatment of tuberculosis is being seriously impaired by the absence of a tuberculosis dispensary in the immediate neighbourhood. Efforts were made to rent suitable premises, but did not prove successful, and building afforded the only satisfactory alternative.

The Council owns a piece of land in Greenhill Crescent, which was acquired for the erection of an elementary school, but no longer is required for that purpose.

This land is in a suitable position for the erection of a sub-dispensary, and accordingly, with the approval of the Board of Education and the Ministry of Health, a piece of this land has been alienated for the erection thereon of a sub-dispensary, and plans have been approved by the Council.

In the early days of the scheme the Council had no institution of its own for the reception of patients suffering from tuberculosis, with the exception of the 16 beds at Hounslow Dispensary, already referred to. Reliance, therefore, had to be placed upon accommodation belonging to various voluntary and other bodies. Agreement was entered into with the Middlesex Districts Joint Smallpox Hospital Board for the admission of cases of pulmonary tuberculosis to Clare Hall Hospital, South Mimms, and this agreement still is in operation. Later, arrangements with the Brentford Guardians were made for the establishment and maintenance of the County Council Tuberculosis Hospital at Isleworth for the reception of male patients suffering from advanced pulmonary disease; this arrangement also still continues. Beds for Middlesex patients were reserved at various other institutions, but, with the opening of the County Sanatorium at Harefield in 1921, all agreements for the reservation of beds for patients suffering from pulmonary disease, other than the two mentioned above, were terminated. The number of beds available at each of the institutions belonging to, or reserved for the sole use of, the County Council, together with a list of other institutions at which patients have been maintained during 1925, is shown below :—

Institution.	Accommodation.			Type of case.
	Adults.		Children.	
	M.	F.		
*County Council Sanatorium, Harefield	129	129	56	Pulmonary — sanatorium.
	—	—	8	Pulmonary—observation.
County Council Dispensary, Hounslow	9	7	—	Pulmonary—observation.
County Council Hospital, Isleworth	40	—	—	Pulmonary—hospital.
Clare Hall, South Mimms	120	66	—	Pulmonary—late sanatorium and hospital.

*For detailed information regarding the County Sanatorium, Harefield, and the work carried out thereat during 1925, reference should be made to the Report of the Medical Superintendent, which appears on pages 125 *et seq.* of this Report.

Other Institutions.

Sanatoria.—Benenden, Kent; Brompton Hospital and Frimley; Church Army Sanatoria, Pine Grove, Church Crookham and Heath End, Farnham; Eversfield, Sussex; Fairlight, Hastings; Holy Cross, Haslemere; King Edward VII, Midhurst; Maltings Farm, Nayland, Suffolk; Mendip Hills, Somerset; Mt. Vernon, Northwood; Royal National, Bournemouth; Royal National, Ventnor.	Pulmonary—various types
Colonies.—British Legion Village, Preston Hall, Kent; Papworth Hall Farm, Cambridge.	
Homes for very advanced cases.—St. Columba's, Swiss Cottage; St. Luke's, Bayswater.	
Hospitals.—All Saints, London; Atkinson Morley Convalescent, Wimbledon; Hendon Cottage; Prince of Wales's, Tottenham; Royal National Orthopædic, London; Royal Sea-Bathing, Margate; St. Anthony's, Cheam; St. Mary's, Paddington; University College, London.	Non-pulmonary—adults.
Alexandra Hospital for Hip Disease, Swanley, Kent; Cheyne Hospital, Chelsea; Children's Hospital, Barnet; Children's Hospital, Coldash, Newbury; Children's Hospital, Sevenoaks; Heatherwood, Ascot; Hendon Cottage; Lord Mayor Treloar Cripples', Alton; Royal National Orthopædic, Country Branch, Stanmore; Royal Sea-Bathing, Margate; St. Anthony's, Cheam; St. John's, London; St. Thomas's, London; St. Vincent's, Pinner; Victoria Home, Margate (6 reserved beds); Whittuck Home, Broadstairs; Wingfield Orthopædic, Oxford.	Non-pulmonary—children.

The year 1925 has been marked by the introduction by the Ministry of Health of a comprehensive system of record keeping in connection with tuberculosis schemes. The object of this is to obtain uniform information from all local authorities engaged in the prevention and treatment of tuberculosis, to provide statistics in such a form as will indicate the scope and amount of work carried out by each authority, and at the same time amass a fund of information which eventually should prove of enormous value in assessing the benefits the organised treatment of tuberculosis is securing.

Whilst a considerable amount of clerical labour has been necessitated in order to supply the information required

by the Ministry, and certain slight modifications in the forms in use, &c., have had to be made, the system of record keeping in this County has proved its completeness and efficiency in enabling all the tables to be completed for the year 1925, although absolute compliance was not compulsory before the close of 1926.

These tables are as follows :—

Table I.—Annual Return showing the work of the dispensaries during the year 1925.

Table II.—Residential Institutions—

(*a*) Average number of beds available for patients during the year 1925.

(*b*) Return showing the extent of residential treatment during the year 1925.

Table III.—Annual Return showing the immediate results of treatment of patients and of observation of doubtful cases discharged from residential institutions during the year 1925.

Table IV.—Pulmonary : Annual Return showing in summary form the condition of all patients where case records are in the possession of the dispensaries at the end of 1925, arranged according to the years in which the patients first came under public medical treatment for pulmonary tuberculosis and their classification as shown below.

Non-pulmonary.—Ditto.

In order to understand the tables the following definitions and suggestions of the Ministry of Health must be borne in mind :—

Classification.—*Patients diagnosed as suffering from Pulmonary Tuberculosis* are placed in the following categories :—

Class T.B. minus, viz., cases in which tubercle bacilli have never been demonstrated in the sputum ; and

Class T.B. plus, viz., cases in which tubercle bacilli have at any time been found. It should be noted that a patient originally in *Class T.B. minus* must be transferred to *Class T.B. plus* at any stage in the course of treatment

if and when tubercle bacilli are found ; while, on the other hand, a patient who is once placed in *Class T.B. plus* can never revert to *Class T.B. minus*. *Class T.B. plus* is further subdivided into three groups as follows :—

Group 1.—Cases with slight constitutional disturbance, if any, *e.g.*, there should not be marked acceleration of pulse nor elevation of temperature except of very transient duration ; gastro-intestinal disturbance or emaciation, if present, should not be excessive.

The obvious physical signs should be of very limited extent as follows :—Either present in one lobe only and in the case of an apical lesion of one upper lobe not extending below the second rib in front or not exceeding an equivalent area in any one lobe ; or where these physical signs are present in more than one lobe they should be limited to the apices of the upper lobes and should not extend below the clavicle and the spine of the scapula.

No complication (tuberculous or other) of prognostic gravity should be present. A small area of dry pleurisy does not exclude a case from this group.

Group 3.—Cases with profound systemic disturbance or constitutional deterioration, with marked impairment of function, either local or general, and with little or no prospect of recovery.

All cases with grave complications, whether tuberculous or not, are classified in this group, *e.g.*, diabetes, tuberculosis of larynx or intestine, &c.

Group 2.—All cases which cannot be placed in Groups 1 and 3.

Patients suffering from Non-Pulmonary Tuberculosis are classified according to the site of the lesion as follows :—

(1) Tuberculosis of bones and joints.
(2) Abdominal tuberculosis (*i.e.*, tuberculosis of peritoneum, intestines or mesenteric glands).
(3) Tuberculosis of other organs.
(4) Tuberculosis of peripheral glands.

Patients suffering from multiple lesions are classified in one sub-group only, viz., in that applicable to the case which stands highest in the table.

Observation Cases.—Persons attending at, or in connection with, the dispensaries, in whose cases the Tuberculosis Officer cannot, within a period of one month from his first examination of the case, come to a definite diagnosis after physical examination and the application of the necessary tests. (These appear on Table I A and B, under sub-section *b*.)

Quiescent.—Cases which have no symptoms of tuberculosis and no signs of tuberculous disease except such as are compatible with a completely healed lesion, and in which sputum, if present, is free from tubercle bacilli.

Arrested.—In pulmonary cases the term "arrested" is applied only to cases which have been "quiescent" for a period of at least two years.

In non-pulmonary cases the term "arrested" is used as soon as there is reason to believe that the disease is unlikely to recur.

Cured.—No patient is deemed to be "cured" until in the case of pulmonary tuberculosis, five years, and, in the case of non-pulmonary tuberculosis, three years, have elapsed without any symptoms of active disease (*i.e.*, arrest has been maintained for three years).

Table I.

Annual Return showing the work of the Dispensary (or Dispensaries) during the year 1925.

Diagnosis.	Pulmonary.				Non-Pulmonary.				Total.			
	Adults.		Children.		Adults.		Children.		Adults.		Children.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
A.—*New Cases* examined during the year (excluding contacts) :—												
(*a*) Definitely tuberculous	553	379	32	28	47	33	41	38	600	412	73	66
(*b*) Doubtfully tuberculous	—	—	—	—	—	—	—	—	126	128	73	56
(*c*) Non-tuberculous	—	—	—	—	—	—	—	—	321	259	116	87
B.—*Contacts* examined during the year :—												
(*a*) Definitely tuberculous	21	52	6	10	5	4	4	10	26	56	10	20
(*b*) Doubtfully tuberculous	—	—	—	—	—	—	—	—	17	28	38	50
(*c*) Non-tuberculous	—	—	—	—	—	—	—	—	48	93	151	149
C.—*Cases* written off the Dispensary Register as :—												
(*a*) Cured	109	109	31	22	17	17	35	23	126	126	66	45
(*b*) Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error)	—	—	—	—	—	—	—	—	410	444	328	280

D.—*Number of persons* on Dispensary Register on 31st December :—												
(*a*) Diagnosis completed	1,986	1,310	204	195	179	154	212	214	2,165	1,464	416	409
(*b*) Diagnosis not completed	—	—	—	—	—	—	—	—	250	297	282	268

1. Number of persons on Dispensary Register on 1st January	6,000	9. Number of patients to whom Dental Treatment was given, at or in connection with the Dispensary	—
2. Number of patients transferred from other areas and of "lost sight of" cases returned	90	10. Number of consultations with medical practitioners :—	
3. Number of patients transferred to other areas and cases "lost sight of"	664	(*a*) At Homes of Applicants	963
4. Died during the year	627	(*b*) Otherwise	
5. Number of observation cases under A (*b*) and B (*b*) above in which period of observation exceeded 2 months	293	11. Number of other visits by Tuberculosis Officers to Homes	
6. Number of attendances at the Dispensary (including contacts)	15,896	12. Number of visits by Nurses or Health Visitors to Homes for Dispensary purposes....	13,393
7. Number of attendances of non-pulmonary cases at Orthopædic Out-stations for treatment or supervision	—	13. Number of :—	
8. Number of attendances at General Hospitals or other Institutions approved for the purpose, of patients for :—		(*a*) Specimens of sputum, &c., examined	1,493
(*a*) "Light" treatment	1,564	(*b*) X-ray examinations made in connection with Dispensary work	116
(*b*) Other special forms of treatment	148	14. Number of Insured Persons on Dispensary Register on the 31st December	2,918
		15. Number of Insured Persons under Domiciliary Treatment on the 31st December	129
		16. Number of reports received during the year in respect of Insured Persons :—	
		(*a*) Form G.P. 17	87
		(*b*) Form G.P. 36	203

Table II.—Residential Institutions.

(*a*) *Average Number of Beds available for Patients during the year* 1925.

—	Observation.	Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		
		"Sanatorium" Beds.	"Hospital" Beds.	Disease of Bones and Joints.	Other Conditions.	Total.
Adult Males	9	140	161	41		351
Adult Females	7	132	66	34		239
Children under 15	8	65	—	94		167
Total	24	337	*227	169		757

* 66 male and 66 female beds classified as "Hospital" beds are at Clare Hall Hospital, and are available for hospital cases or sanatorium cases as necessary.

(*b*) *Return showing the extent of Residential Treatment during the year* 1925.

—	In Institutions on 1st Jan.	Admitted during the year.	Discharged during the year.	Died in the Institutions.	In Institutions on 31st Dec.
Number of patients					
Adults—					
Males	328	682	545	165	300
Females	209	465	360	72	242
Children—					
Males	86	86	93	4	74
Females	66	93	90	1	69
Number of observation cases—					
Adults—					
Males	2	94	91	—	5
Females	4	67	67	—	4
Children—					
Males	2	36	38	—	—
Females	3	35	34	1	3
Total	700	1,558	1,318	243	697

	Individuals Treated.	Admissions.	Discharges.
Patients admitted for one or two nights only for artificial pneumothorax refills—			
Adults—			
Males	6	40	40
Females	17	160	160

Table III.

Annual Return showing the immediate results of treatment of patients and of observation of doubtful cases discharged from Residential Institutions during the year* 1925. *Classification as shown on pages* 99 *et seq.*

Classification on admission to the Institution.		Condition at time of Discharge.	Duration of Residential Treatment in the Institution.												Total.
			Under 3 months.			3—6 months.			6—12 months.			More than 12 months.			
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Pulmonary Tuberculosis.	Class T.B. minus.	Quiescent	7	17	4	32	30	26	4	7	26	1	—	2	156
		Improved	12	7	2	22	16	15	8	11	4	3	—	6	106
		No material improvement	10	5	5	3	5	3	3	1	1	2	—	—	38
		Died in Institution	10	6	—	4	2	—	1	—	—	—	1	—	24
	Class T.B. plus. Group 1.	Quiescent	2	2	—	13	5	—	1	4	—	4	1	—	32
		Improved	18	16	—	53	26	—	25	16	1	2	3	—	160
		No material improvement	8	6	1	5	8	—	8	3	—	3	—	—	42
		Died in Institution	4	5	—	1	—	—	1	3	—	1	—	—	15
	Class T.B. plus. Group 2.	Quiescent	2	1	—	1	1	—	1	3	—	—	1	—	10
		Improved	20	2	—	54	27	—	19	19	—	13	8	—	162
		No material improvement	12	16	1	20	16	—	15	9	2	8	2	1	102
		Died in Institution	18	4	1	16	11	—	7	6	—	3	—	—	66
	Class T.B. plus. Group 3.	Quiescent	—	—	—	1	1	—	2	1	—	—	—	—	5
		Improved	4	1	—	11	7	1	9	5	—	5	2	—	45
		No material improvement	18	8	—	19	20	—	7	12	—	6	5	—	95
		Died in Institution	68	17	—	16	7	—	6	3	—	3	4	1	125

Non-Pulmonary Tuberculosis.	Bones and Joints.	Quiescent or Arrested	1	—	1	5	1	1	8	2	7	7	2	7	42
		Improved	1	1	—	6	5	2	2	1	4	2	1	5	30
		No material improvement	1	1	1	—	1	2	3	—	1	2	1	—	13
		Died in Institution	—	—	—	1	1	1	1	1	—	1	—	—	6
	Abdominal.	Quiescent or Arrested	—	—	—	2	2	2	—	—	—	—	—	1	7
		Improved	—	—	2	—	1	2	—	—	—	—	—	—	5
		No material improvement	—	—	1	—	—	—	—	—	—	—	—	1	2
		Died in Institution	—	1	1	1	—	—	—	—	1	—	—	—	4
	Other Organs.	Quiescent or Arrested	1	—	2	1	1	—	—	—	—	—	—	3	8
		Improved	1	1	1	—	2	—	1	1	—	—	2	—	9
		No material improvement	1	—	—	—	—	—	—	—	—	—	—	—	1
		Died in Institution	1	—	—	—	1	—	—	—	—	—	—	—	2
	Peripheral Glands.	Quiescent or Arrested	—	1	2	—	2	5	—	—	8	—	—	4	22
		Improved	1	—	2	1	1	3	—	—	4	1	—	2	15
		No material improvement	—	—	1	—	—	—	—	—	—	—	—	—	1
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—
			Under 1 week.			1—2 weeks.			2—4 weeks.			More than 4 weeks.			
Observation for purpose of diagnosis.		Tuberculous	3	—	1	6	3	4	16	10	22	18	9	14	106
		Non-tuberculous	3	2	—	17	20	3	15	10	18	1	—	4	93
		Doubtful	1	—	—	—	1	1	1	4	2	—	—	1	11
		Died in Institution	—	—	—	—	—	—	—	—	—	—	1	—	1

* The definition of "patient" does not include persons in whom a definite diagnosis of tuberculosis has not been made.

Table IV.—Pulmonary.

Annual Return showing in summary form the condition of all Patients whose case records are in the possession of the Dispensaries at the end of 1925, *arranged according to the years in which the Patients first came under Public Medical Treatment for Pulmonary Tuberculosis, and their classification as shown on pages* 99 *et seq.*

Condition at the time of the last record made during the year to which the Return relates.	Previous to 1925.					1925.				
	Class T.B. minus.	Class T.B. plus.				Class T.B. minus.	Class T.B. plus.			
		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).
Alive—										
Discharged as cured—										
Adults—										
Males	79	27	3	—	30	—	—	—	—	—
Females	95	11	2	1	14	—	—	—	—	—
Children—										
Males	31	—	—	—	—	—	—	—	—	—
Females	22	—	—	—	—	—	—	—	—	—

Disease arrested—										
Adults—										
Males	292	113	17	3	133	—	—	—	—	—
Females	214	30	3	—	33	2	1	—	—	1
Children—										
Males	68	1	1	—	2	—	—	—	—	—
Females	70	2	—	—	2	—	—	—	—	—
Disease not arrested—										
Adults—										
Males	365	359	320	107	786	125	116	110	33	259
Females	241	168	181	67	416	97	102	94	33	229
Children—										
Males	89	4	5	—	9	35	2	—	—	2
Females	82	3	3	3	9	26	1	3	—	4
Dead—										
Adults—										
Males	24	29	61	89	179	20	8	37	113	158
Females	18	10	33	63	106	8	3	20	44	67
Children—										
Males	2	1	1	3	5	—	—	—	1	1
Females	6	—	1	3	4	2	—	1	1	2
Lost sight of or otherwise removed from Dispensary Register	194	71	83	20	174	53	29	22	15	66
Totals	1,892	829	714	359	1,902	368	262	287	240	789

TABLE IV.—NON-PULMONARY.

Annual Return showing in summary form the condition of all Patients whose case records are in the possession of the Dispensaries at the end of 1925, *arranged according to the years in which the Patients first came under Public Medical Treatment, and their classification as shown on pages* 100 *and* 101.

Condition at the time of the last record made during the year to which the Return relates.	Previous to 1925.					1925.				
	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.
Alive—										
Discharged as cured—										
Adults—										
Males	9	4	1	3	17	—	—	—	—	—
Females	7	4	1	5	17	—	—	—	—	—
Children—										
Males	13	8	—	14	35	—	—	—	—	—
Females	9	2	5	7	23	—	—	—	—	—

Disease arrested—										
Adults—										
Males	18	1	13	3	35	4	—	—	—	4
Females	13	—	2	5	20	1	—	1	1	3
Children—										
Males	31	7	4	19	61	2	—	—	—	2
Females	23	4	8	25	60	—	—	—	2	2
Disease not arrested—										
Adults—										
Males	70	6	12	8	96	22	4	7	3	36
Females	34	8	23	14	79	14	5	3	8	30
Children—										
Males	61	15	11	22	109	16	10	5	16	47
Females	49	7	7	30	93	26	4	5	10	45
Dead—										
Adults—										
Males	5	1	1	—	7	1	1	1	—	3
Females	3	1	1	—	5	1	—	1	—	2
Children—										
Males	—	3	—	—	3	1	—	—	—	1
Females	—	3	—	—	3	1	—	—	—	1
Transferred to pulmonary	3	—	—	—	3	—	—	—	—	—
Lost sight of or otherwise removed from Dispensary Register	40	12	11	21	84	2	2	1	2	7
Totals	388	86	100	176	750	91	26	24	42	183

It will be seen that the foregoing tables afford very detailed information of the nature and extent of the work carried out during 1925. At the same time the Ministry of Health requires information under a number of other headings. The Council's tuberculosis officers have given careful consideration to these, and the considered opinion of these officers is contained in their Annual Report on the working of the scheme (page 114 *et seq.*). I do not propose to add to the information contained in this report on the work of the scheme during the year 1925, but attention may well be drawn to several facts which a survey of the work of the past five years brings to light.

1. The number of new cases of tuberculosis disclosed each year shows a fairly steady decrease.
2. The annual mortality rate from tuberculosis is decreasing.
3. The average number of patients maintained in institutions by the Council is increasing each year.
4. The number of tuberculous ex-service men (T.D.S.) under treatment is falling rapidly.

These and other facts are shown by the following comparative tables :—

Summary of Dispensary activities during the past 5 years.

Year.	Number of persons examined for the first time.	Number diagnosed as tuberculous.	Persons under treatment or observation at close of year.			Home visits by nurses.		
			Civilians.	T.D.S.	Total.	Civilians.	T.D.S.	Total.
1921	3,393	1,508	4,591	1,334	5,925	10,268	3,199	13,467
1922	3,081	1,289	4,357	1,245	5,602	10,852	2,892	13,744
1923	3,276	1,370	4,198	1,078	5,276	12,026	2,751	14,777
1924	3,265	1,350	4,302	973	5,275	11,960	2,495	14,455
1925	3,003	1,263	4,672	879	5,551	10,994	1,979	12,973

Summary of Institutional activities during the past 5 years.

Year.	Admissions.			Remaining in on 31st December.			Average number of persons in institutions throughout the year.	Death-rate from tuberculosis per 1,000 living.
	Civilians.	T.D.S.	Total.	Civilians.	T.D.S.	Total.		
1921	1,385	443	1,828	592	127	719	674	0·94
1922	1,227	304	1,531	513	82	595	687	0·90
1923	1,305	249	1,554	563	81	644	692	0·88
1924	1,319	208	1,527	629	62	691	700	0·92
1925	1,404	154	1,558	651	46	697	728	0·84

Annual Report of the Council's Tuberculosis Officers.

The matter in this Report is arranged in the form of answers to the specific headings of enquiry laid down by the Ministry of Health.

Precise particulars of arrangements for co-operation with Sanitary Authorities and their officers.

In December, 1924, the Ministry of Health issued a circular (No. 549) to local sanitary authorities accompanying the Public Health (Tuberculosis) Regulations, 1924, and these have resulted in tightening up the requirements of the Public Health (Tuberculosis) Regulations, 1912 and 1921, as regards notifications of tuberculosis and the keeping of an up-to-date register of such notifications in each sanitary area. The further effect of this has been to make the co-operation between the local sanitary authorities and the dispensaries closer than ever. All cases newly diagnosed by the tuberculosis officer are reported to the local medical officer of health, unless previously notified by the doctor in attendance, together with a list of all deaths, removals, cures, transfers, changes of address and cases "lost sight of." The local medical officers of health are also informed when cases are admitted to, or discharged from, institutions in order that they may take the necessary steps for disinfection of premises, &c., should they think fit.

The local authorities and the tuberculosis officers have collaborated closely in the matter of scrutinising the registers of notifications and bringing them up-to-date. All records have been mutually open to examination with a view to establishing correct registers of actual cases current. The respective officers are in constant close touch for the purpose of reciprocal information. Reports on the environmental conditions of new cases are sent to the local sanitary authority as necessary, attention being called to any overcrowding and sanitary or other defects.

A weekly list of tuberculosis notifications in the several areas is sent to the County Medical Officer by the local

medical officers of health. These lists are passed on as soon as possible to the tuberculosis officer concerned, who thus becomes cognisant of all cases notified in his area, and is able to take the necessary steps to get in touch with those in need of public assistance.

The nature and extent of co-operation with general and special hospitals, school clinics and other institutions.

Patients admitted to general or special hospitals for observation or treatment, and who are found to be tuberculous and in need of sanatorium treatment or of surgical instruments, are, in a great number of cases, referred by the hospital authorities to the tuberculosis officer, full details of the patient's condition being supplied on the requisite clinical forms. In many cases hospital authorities are supplied, on request, with a report on the environmental conditions of the patients' homes, and periodical reports are supplied to certain chest hospitals and local authorities as to the after-progress of their cases who are now resident in Middlesex.

Children under school age and mothers are sent to the dispensaries for an opinion by the local welfare centres under maternity and child welfare schemes when the medical officers are suspicious of tuberculosis, and reports are freely exchanged. Suspicious cases arising amongst children of school age are sent to the dispensaries in large numbers by the school medical officers for advice and, if necessary, treatment. The co-operation between these branches of the public health service is of the closest. Reports are made on the children's medical cards and by letter, and their fitness or otherwise for school attendance indicated thereon.

Work undertaken in connection with the Ministry of Pensions continues to engage a considerable amount of tuberculosis officers' time. The Ministry of Pensions Medical Boards still make application for reports upon ex-service men applying for pension on the grounds of chest trouble or surgical tuberculosis. Reports also are called for upon tuberculosis pensioners at the periodical survey dates.

With the local branches of the Ministry of Pensions co-operation is as close, in regard to pensioners, as that between the tuberculosis officers and the local sanitary authority in regard to other cases, information being freely supplied upon all the multifarious points arising in the course of the pátient's illness. In his capacity as medical referee for the tuberculosis cases of the Ministry of Pensions, the tuberculosis officer has to recommend the provision of treatment allowances in cases where he deems it necessary, and these cases have to be reviewed and reported on periodically. The number of pensioners treated at the dispensaries is slowly declining, fewer new cases being accepted and the old ones becoming less owing to death or to final settlement of pension when "cured."

The British Red Cross, the Order of St. John of Jerusalem, the British Legion, and the United Services Fund all co-operate with the dispensaries, and give great assistance in the treatment and care of ex-service men, whether pensioners or not, and many such are helped financially.

The United Services Fund Home at Douglas House, Bournemouth, has been made use of extensively for giving convalescent tuberculous ex-service men an occasional much-needed change when actual sanatorium treatment has not been required.

Any special arrangements made to secure the co-operation of medical practitioners and the working of the arrangements in regard to the co-ordination of the work of Tuberculosis Officers and insurance practitioners.

The co-operation between the tuberculosis officers and insurance and private practitioners in charge of cases has always been very close, but, as a result of instructions contained in Memorandum 286 of the Ministry of Health, this has recently become still closer. This memorandum introduced a number of forms for inter-communication between the tuberculosis officer and the panel doctors, which are extensively utilised.

The great majority of the cases seen at the dispensaries in the first place are sent up for an opinion by the practitioners in charge of them. The tuberculosis officer

indicates his opinion of the case, either by letter, personal consultation, or on the requisite form, and if he thinks any change of treatment advisable during the course of the case he notifies the practitioner. A report is sent to the doctor when his patient is discharged from an institution, fully informing him of the progress made and the methods of treatment adopted in the institution.

Cases of domiciliary treatment under their own doctor are periodically reported on to the tuberculosis officer on a special "Record of Progress Form," and any suggestions as to further treatment contained therein receive immediate consideration.

In all cases newly diagnosed as tuberculous an effort is made to ensure notification by the practitioner concerned.

When required, consultations are arranged with the practitioner at the homes of the patients, or more frequently at the dispensaries.

The arrangements for following up cases where the diagnosis is doubtful.

The majority of patients referred to the dispensary may fairly readily be assessed as tuberculous or non-tuberculous, but where the diagnosis is doubtful, appointments are made for further examinations, with records of temperature, frequent examinations of sputum (if present), and, where necessary, screening or filming by X-rays. This generally leads to a definite diagnosis being established, but where this cannot be arrived at within a reasonable time, or where it appears that better opportunities for diagnosis would be afforded by investigation under closer control, it is customary to recommend institutional observation at Hounslow or Harefield in the case of lung suspects, or at certain general and special hospitals in non-pulmonary cases. Occasionally also, use is made of out-patient departments of general or other hospitals where the tuberculosis officer is aware of the special experience or interest of the surgeon or physician in charge in regard to particular suspected organs. This procedure is rarely called for in relation to pulmonary diseases, but is often of distinct value in the investigation of eye, skin and joint diseases,

and particularly in those cases with genito-urinary symptoms where cystoscopy may be necessary.

The arrangements for securing the examination and systematic supervision of "home contacts."

Attempts invariably are made to ensure the examination of all contacts when a case is found to be tuberculous, but the response to these attempts is not all that it should be.

There being no compulsion to attend, a good many contacts omit to do so, especially in the case of adults who are at work and who feel quite well. The children are easier to deal with, being mostly under the supervision of the school medical officers, who send all doubtful cases to the tuberculosis officer.

The tuberculosis nurses keep a close observation on all contacts during their periodic visits to the homes of patients, and any found to be out of sorts or debilitated are urged to attend for examination or re-examination. Systematic calling up of all contacts for periodic and frequent examinations would be impossible without a considerable increase both of staff and accommodation. The patients themselves are found, as a rule, to be the best propagandists, and readily urge their relatives to submit to examination when the importance of so doing is pointed out to them.

During the year 686 contacts were newly examined, of whom 112 were found to be suffering from tuberculosis in one form or another.

Information as to special methods of diagnosis and treatment in use, and the number of persons to whom these special methods have been applied.

Arrangement with the radiographical departments of conveniently situated general hospitals for screening and X-ray reports are in force in most districts, and considerable use is made of this aid to diagnosis : 116 such examinations were carried out during the year. Sputum tests are extensively carried out at the dispensaries, 1,493 tests being made in 1925. In our opinion the stethoscope still holds pride of place as a diagnostic instrument.

The complement fixation test has been tried in certain of our cases, but a positive or negative result has proved of little value in itself unless correlated with the results of physical examination and other more generally accepted tests. This holds good also in regard to diagnostic tuberculin tests, epi-dermal, intra-dermal or subcutaneous.

In respect of special treatment, that of artificial pneumothorax is now very widely used. At Harefield Sanatorium, in conjunction with X-ray facilities, this method of treatment has been adopted in many suitable cases, and arrangements are made for " refills " over as long a period as may be deemed necessary.

The results of this treatment so far have proved most encouraging, and 23 patients were dealt with during the year, between them making a total of 200 attendances.

In non-pulmonary cases use has been made of special forms of treatment either in institutions or by arrangement with the special departments of the general hospitals. Such forms of treatment include the use of Finsen light, carbon arc, tungsten and mercury-vapour lamps, the so-called " artificial sunlight " treatment, and a total of 29 patients have received one or other form of treatment during 1925.

As an aid to the diagnosis of doubtful cases of pulmonary tuberculosis the examination of stained films from the fæces for the presence of tubercle bacilli has been found to be of value in one area. The method has been adopted in the cases which show clinical signs of disease in the lungs, but in which there is no expectoration available for examination, or in which the expectoration has been found to contain no tubercle bacilli. Out of the films from the stools of 134 cases examined at the head dispensary in this area 34 were found to contain tubercle bacilli. The procedure cannot be looked upon as a means of diagnosis alone, but it is of help as a confirmatory measure and for classification purposes; further, the impression has been formed that the prognosis is bad in those cases where tubercle bacilli have been found in the fæces.

An ointment recommended by Sir Robert Phillip, of Edinburgh, consisting of tuberculin original K, eucalyptol

and eucerin, has been found of great utility in one area as a local application in enlarged cervial glands.

The results of local experience as to the relative value of each form of treatment.

In the absence of the long looked for " specific cure " for tuberculosis, we still pin our faith to sanatorium treatment as being, so far, the most efficient and hopeful method of dealing with the disease. Quite apart from the actual results of treatment, the segregation of an infectious case, even though only temporary, must, in our opinion, have a beneficial effect upon the health of the community. The educative effect of sanatorium treatment also must not be forgotten. Regularity of living and care in the avoidance of spreading infection can only be impressed upon patients by practical experience in an institution.

The nature and extent of any dental treatment provided by the Council for tuberculous patients.

Dental treatment is provided for patients in the County Sanatorium at Harefield to the great improvement of their general condition and digestive functions. (For further information see pages 128 and 129.)

Treatment for the teeth now can generally be obtained by insured patients through the medium of their approved societies.

Any arrangements for the provision of nursing or of extra nourishment for patients living at home.

Most of the cases needing nursing are recommended for institutional treatment. Apart from this, daily visitation is done, to a certain extent, through the local district nursing associations, where such exist, or by other district nurses. In some of the poorer districts there are no nursing associations, and great difficulty is experienced in obtaining nursing for these patients.

Extra nourishment is granted to approved cases for limited periods where its provision is part of the medical treatment, and where the food can be considered to have a

specific inhibiting effect upon the disease. For all ordinary cases this is given only :—

(1) To prevent retrogression where a patient is awaiting institutional treatment when a vacancy is not at the moment available.

(2) After a period of institutional treatment where the patient is not yet fit for work, but where the provision of such extra diet is likely to maintain the progress already made, and in a reasonable time to afford a prospect of resumption of work.

It is often a difficult matter to dissociate this question from that of lowered economic conditions or real poverty, and therefore each case has to be carefully reviewed before a recommendation is made, as the scheme does not allow for relief of destitution alone.

Where destitution exists without the definite medical indications for a grant as noted above, the patients are referred to the Guardians for assistance.

The arrangements for treating non-pulmonary tuberculosis, especially tuberculosis of bones and joints in adults and in children, and for the provision of surgical appliances, &c.

Though the County Council has no institutions for non-pulmonary cases, arrangements are in existence whereby patients needing residential treatment are referred for admission to various special hospitals (see page 98).

Treatment for this class of case is often rather prolonged, especially in children, and partly as a result, the younger the age the greater is the difficulty experienced in obtaining vacancies readily. Increased accommodation for these cases is desirable.

Cases of tuberculosis of bones and joints in adults and children, almost without exception, are recommended for institutional treatment. Quite a fair proportion of these, when brought to our notice, already have received some treatment at a general or special hospital, and need transference to an institution devoted entirely to tuberculosis. All such cases should, we feel, be given early and

prolonged institutional treatment; out-patient treatment, especially in the case of children, being ineffective and dangerous.

The provision of surgical apparatus presents no special difficulty, and for the most part a recommendation by the tuberculosis officers to the County Council is made on the report from the institution dealing with the case. Instruments are only provided when they are a necessary part of treatment and for active disease, and *not* as a relief of old-standing inactive deformity. Cases requiring apparatus for the latter conditions are advised to apply to a surgical aid society, or, if children, to the local education authority. New apparatus is seldom required by patients attending the dispensary, but repairs and replacements are often found necessary, and appropriate action is taken.

Particular forms of non-pulmonary disease, such as lupus, are best treated at special departments of certain London hospitals as out-patients, and arrangements have been made for the treatment of such cases, at fixed rates, by Finsen and other light methods.

The arrangements for "care" and "after-care" and their working.

No after-care committees so far have been established in Middlesex. The tuberculosis nurses keep in close touch with the patients throughout the period of their illness, and, with the tuberculosis officers, give all the advice and supervision necessary.

Under the present economic conditions very little more can be done by further visitation unless financial assistance can be provided from ample funds.

Particulars as to any local arrangements for finding employment for patients.

No local arrangements are in existence in the County for finding employment for patients, except in the ordinary way through the medium of the Labour Exchanges. When a patient, though unfit for his previous occupation, is well enough to work at a more suitable one, the tuberculosis officers frequently communicate with the local exchanges,

suggesting the type of employment considered advisable, and requesting assistance in procuring it where possible. The present stagnation in the labour market makes this question of employment a very difficult problem for the restored consumptive. The stigma attaching to tuberculosis is a very real thing, and, as a rule, employers are very little disposed to give work to such people. Usually the patient, either by his own efforts obtains employment at his old occupation, or remaining unemployed, with consequent deterioration in his condition, soon requires further treatment for his disability.

Statement as to the supply and supervision of shelters at the homes of patients.

Nineteen shelters have been provided by the County Council, and these are loaned out free of charge in suitable cases where sufficient space is available. The use and condition of these shelters are supervised by the visits of the tuberculosis officers and tuberculosis nurses. Their usefulness should not be exaggerated.

Any special points noted locally as to the incidence of tuberculosis (e.g., occupation).

The greater the poverty and overcrowding, the greater the incidence of tuberculosis. We have not noticed any particular occupational incidence.

Any special methods adopted or proposed for the prevention of tuberculosis, and special difficulties encountered.

We would again stress the need of more housing accommodation for the relief of overcrowding. The evils of subletting and the consequent crowding of families into two or three rooms can only be overcome by the provision of more and better houses. The shortage of houses continues to be the greatest barrier to effective tuberculosis prevention. Unless the advanced consumptive can be properly segregated we cannot hope to prevent the infection of others.

Legislation has recently been introduced for the compulsory segregation in institutions of advanced and infectious cases, but the powers therein conferred are so hedged round with limitations that one would hesitate to put them into operation except in the most urgent circumstances.

In the event of the suggested change in the control of the Poor Law administration, we feel strongly that some accommodation should be set aside in Poor Law institutions for the treatment of advanced cases of tuberculosis. These cases would, in our opinion, be more likely to remain in hospital for prolonged periods if they were accommodated somewhere near their homes and within easy visiting distance of their families. The great difficulty at present is that advanced cases, feeling they are not improving, frequently discharge themselves to their homes, their relations not being able to afford the frequent visits necessary to more distant institutions. Thus cases in their most infectious stage return home possibly to do irreparable damage to those nearly associated with them.

Representatives of the tuberculosis officers attended the Annual Conference of the National Association for the Prevention of Tuberculosis held in London in July, 1925. A report on the proceedings was submitted and valuable information gained on the latest methods of treatment, including that by sanocrysin, and on the latest views on the subject of tuberculosis in general. The early infection in childhood was particularly stressed and also the vital importance of the care of the so-called " pre-tubercular " child if any progress is to be made in the control of the disease.

We feel the provision of convalescent treatment for the weakly and debilitated child to be a most important, perhaps *the* most important, matter in any scheme for the prevention of tuberculosis. This provision is made in some areas through the agency of the Invalid Children's Aid Association, but in many areas no such organisation exists. We would urge that, where this is the case, some effort should be made locally to encourage the establishment of a branch of the Association, or that some other means of getting these children away to pure air and better surroundings be adopted.

Annual Report of the Medical Superintendent of the County Sanatorium, Harefield.

Situation.—The sanatorium, which was opened in 1921, is situated within three miles of Northwood and Rickmansworth Stations (Metropolitan and Great Central Joint Railways), and within the same distance of Denham Station (Great Western and Great Central Joint Railways).

Patients usually travel to either Northwood or Denham, and are conveyed from these stations by an ambulance.

Accommodation.—The institution stands in about 130 acres of grounds, composed of gardens, cultivated pasture and woodlands, and has accommodation for 129 males, 129 females and 56 children, with an additional eight beds for the observation of children. A total of 322 beds.

Staff.—The full staff is as follows :—

Medical Staff.—Medical Superintendent and three medical officers.

Nursing Staff.—Matron, 10 sisters, 13 staff nurses and 27 probationer nurses.

Domestic Staff.—Fifty in number, including cooks, laundresses, seamstresses and other maids.

There are also one dispenser and two school teachers.

Accommodation is found for the above staff in the institution grounds.

Male Staff.—Steward, clerk, engineer, electrician, ambulance driver, carpenter, head gardener, pig and poultry man, and 30 other grades of staff, including garden labourers, horsemen, painters, porters, stokers, &c.

Eight houses and bungalows are provided on the estate for eight married male employees.

A dentist visits once weekly.

The religious needs of patients and staff are attended to by a Church of England chaplain, a priest of the Roman Catholic Church, and a Nonconformist minister: these attend at least once weekly.

Admissions.—During the year 1925, 635 patients were admitted, viz., 243 males, 278 females and 114 children, 62 of whom were for observation.

Discharges.—During the same period 578 patients were discharged: 224 males, 233 females, 98 children after treatment, and 23 children after observation.

Classification.—The classification of cases in this report is that suggested by the Ministry of Health (see pages 99 *et seq*).

The following table shows the condition of patients discharged after treatment during 1925 :—

Stage of Disease on Admission.	Number discharged.	Average Duration of treatment (in days).	Condition on Discharge.		
			*Quiescent. Per cent.	†Improved. Per cent.	No improvement. Per cent.
Class T.B. minus—					
Males	67	124	34·3	49·2	16·5
Females	92	122	60·8	32·6	6·6
Children	91	194	76·9	16·5	6·6
Total	250	—	59·6	31·2	9·2
Class T.B. plus— Group 1—					
Males	17	115	29·4	53·0	17·6
Females	20	151	50·0	40·0	10·0
Children	1	599	100·0	—	—
Total	38	—	42·1	44·7	13·2
Class T.B. plus— Group 2—					
Males	90	201	6·6	62·2	31·2
Females	92	194	9·7	75·0	15·3
Children	2	299	50·0	50·0	—
Total	184	—	8·7	68·4	22·9
Class T.B. plus— Group 3—					
Males	50	236	—	54·0	46·0
Females	29	189	—	51·7	48·3
Children	4	704	—	50·0	50·0
Total	83	—	—	53·0	47·0

* Physical signs compatible with a healed lesion, tubercle bacilli absent from sputum, and general health completely restored.

† Physical signs diminished and general health very good, but tubercle bacilli may be present in sputum.

The following table shows the results of the examination of 49 children who were primarily admitted for observation and who were discharged during the year :—

—	Number Discharged.*	Average length of stay (in days).
Tuberculous	26	14
Non-tuberculous	19	27
Doubtful	4	14

The diagnosis was made by clinical, microscopical and X-rays examination.

During 1925 there were 45 deaths in the institution.

The following table gives the classification on admission of these patients and their average length of stay :—

Stage of Disease on Admission.	Number Died.	Average length of stay (in days).
Class T.B. minus—		
Male	1	73
Class T.B. plus—Group 2—		
Males	5	87
Females	4	183
Class T.B. plus—Group 3—		
Males	17	107
Females	16	130
Children	2	917
Total	45	—

Treatment.—This is much the same as in other sanatoria, and consists of fresh air, an unlimited supply of nourishing food, rest, graduated exercise and work, all of which are regulated under medical supervision.

Certain other forms of treatment have been tried on patients who have failed to respond to the ordinary sanatorium routine.

* The tuberculous cases were transferred to the wards for a period of treatment. The remainder were discharged to their homes.

Collosal manganese, collosal calcium, sodium morrhuate and some of the tuberculins have been tried, but, except in a very few cases, where there has been a temporary improvement, no striking results have been obtained from any of these.

Artificial pneumothorax, controlled by means of an X-rays apparatus, has been of great use in certain cases, and some excellent results have been obtained. Refills were given on 200 occasions to out-patients undergoing artificial pneumothorax treatment. These patients generally stayed in the sanatorium for two nights. It was arranged, as far as possible, that patients who were working should return so as not to interfere with their occupations.

Heliotherapy, or systematic exposure to the sun's rays, has been used in suitable cases with some benefit.

Patients on exercise and work perform such exercise and work in the grounds and gardens.

Some of the work undertaken by the patients is as follows :—

> Weeding, hoeing, grass cutting, watering plants, thinning out, pricking out, light digging, and later heavy digging, lawn mowing, wood cutting, light carpentry, &c.

It is explained to patients that work is a necessary part of their treatment, and no trouble has been experienced in getting them to work.

At intervals lectures are given to patients, both collectively and individually with an educative end in view, on the importance of fresh air and sunshine, after-care, the collection and destruction of sputum, and the prevention of the spread of infection, together with the reasons for such measures.

Dental Treatment.—Dental treatment was commenced in January of this year, and the Senior Dental Officer of the County Council with a dental nurse attends one day weekly.

The teeth of all patients are examined on admission, and, generally speaking, are found to be in a bad state. It is obvious that patients with much dental caries cannot masticate their food properly, and are liable to digestive

trouble. If this caries is associated with pyorrhœa, patients are constantly absorbing poisons which hinder their treatment.

A healthy condition of the mouth is always desirable, and in the case of such a chronic disease as tuberculosis is of the utmost importance. Most marked improvement has been made in some patients after dental treatment for oral sepsis.

In urgent cases dentures are provided at cost price, although the aim and object here is to clear out septic teeth. The extent of the dental treatment carried out during the year is shown by the following table prepared by the dental officer :—

Dental Treatment.

Number of sessions held	92
Number of patients inspected	288
Number of attendances of patients ...	676
Number of patients actually treated ...	217
Fillings—	
Temporary teeth	2
Permanent teeth	120
Extractions—	
Under local anæsthetic—	
Temporary teeth	9
Permanent teeth	323
Under gas—	
Temporary teeth	—
Permanent teeth	27
Number of dentures completed	29
Number of repairs	6
Other treatment—	
Temporary teeth	—
Permanent teeth	2,356

X-rays Apparatus.—This has worked quite satisfactorily, and has been of the greatest use in the treatment by artificial pneumothorax, and of use for diagnostic purposes.

About 200 photographs have been taken during the year.

Patients are occasionally sent in by tuberculosis officers to be X-rayed.

Laboratory.—Sputum examinations are carried out by the dispenser. During the year, 1,128 specimens were examined, and of these, 509 were found to contain tubercle bacilli.

A centrifuge has recently been added to the equipment of the laboratory, and it is anticipated that the percentage of sputa found to be positive will be increased by more efficient methods of examination.

Lectures.—In addition to lectures given to patients, lectures on anatomy and physiology and nursing are given weekly to the probationer nurses during the winter months by the Senior Assistant Medical Officer and the Matron.

Lectures on tuberculosis also are given to the senior nurses. At the end of two years' training an examination is held and a certificate issued to successful candidates.

School.—The school, which is recognised by the Board of Education, has a teaching staff of two, and there are two classes, one for seniors and one for juniors. Children are admitted to the school between the ages of 5 and 16. The attendance varies from 50 to 60 children.

In addition to the usual school subjects, simple lessons are given in physiology and hygiene.

Handwork is a special feature of the school, and since 1922, £70 worth of articles have been sold, chiefly to parents of the children. This money is paid over to the County Council. The handwork undertaken includes raffia work, Indian basketry, leather work, needlework, embroidery, knitting and crochet work.

When the weather permits, weekly walks are taken in the woods and gardens, and children are taught to take an interest in nature. There are two school gardens in which some of the children do light gardening. Flowers are grown in these beds.

A certain number of the children are allowed to do a few simple physical exercises.

Amongst the juniors kindergarten methods are followed, including musical games and stories.

Weather and the subject being taught permitting, classes are held in the open-air.

The provision of tuition for the children has proved of the greatest benefit. The children are happy, make better progress medically, and behave better when suitable and interesting occupations, such as the varied subjects the school curriculum includes, are provided for them.

For recreation the children have a gramophone, games, books, &c. In the summer time mixed cricket is keenly played, the Saturday's match, in which the medical and nursing staff of the ward join, is always looked forward to.

Recreation.—This is a very important side of sanatorium life. There is a recreation room for the men and one for the women.

Tournaments at billiards, chess, draughts, darts, &c., are arranged periodically, and combined whist drives monthly. Concerts are given at regular intervals by outside parties.

Prizes are given for the various tournaments, and the cost of these and the various concert parties is defrayed from the part profits of the patients' canteen. The canteen sells tobacco, cigarettes, chocolates, sweets, soaps, &c., and is run entirely by the patients themselves under the general supervision of the Medical Superintendent.

Gramophones and pianos are also provided.

A wireless set has been installed, which is specially enjoyed by the patients who are confined to bed.

There are putting greens for the men, and it is hoped soon to have a bowling green for men and a croquet lawn for women.

These amusements help to alleviate the tendency to despondency which occurs so often in patients undergoing treatment for prolonged periods.

The staff are provided with a piano and gramophones, and during the winter months a dance is held weekly by the nursing staff.

There are also tennis lawns and croquet lawns which are much used in the summer months.

Sanatorium Chapel.—Hitherto services have been held in the women's recreation room, but a hut is being adapted as a sanatorium chapel, and this will be used by all sects.

Discipline.—Generally speaking this has been excellent, there being few exceptions to the rule, two male patients only being discharged for misconduct during the year.

Gardens.—All vegetables and fruit used in the Institution are grown on the estate. During 1925 there were in all 22 acres under cultivation: 9 for potatoes, 8 for other vegetables of all kinds, and 5 for fruit.

Amongst the vegetables and fruit sent into store during the year were 3 tons of black currants, 2 tons of apples, and about 1 ton of tomatoes. About 60 tons of potatoes also were produced; 30 tons of hay were obtained from the pasture land.

A large quantity of flowers is grown to decorate the patients' quarters.

The grounds of the sanatorium are being gradually improved, especially in front of the wards.

Farm.—On the farm there are about 500 chickens, 100 ducks, 50 geese and 50 pigs; during the year 50,157 eggs and 106 pigs (10,587 lbs. of pork) were sent into store.

Laundry.—All clothing and bedding are washed in the institution laundry, where the work has been satisfactory; the average number of articles washed weekly is 3,850.

Sewing Room.—Two seamstresses are permanently engaged. They make all uniforms for the nursing and domestic staff, and do all necessary sewing repairs.

Stores.—These have been generally satisfactory, there being few complaints as to the quality or quantity of the food provided.

Venereal Diseases.

The scheme of the County Council for dealing with venereal diseases may be considered under three main headings:—

1. Arrangements for the diagnosis and treatment of patients.

2. Publicity arrangements.

3. Arrangements for the free supply of arsenobenzol compounds to medical practitioners approved to receive them.

1. *Arrangements for diagnosis and treatment.*—In view of the proximity of the County to the County of London, and the circumstance that a large proportion of residents in Middlesex suffering from venereal diseases were likely to avail themselves of the facilities for treatment afforded by the large general and special hospitals in London, conferences were held in 1916 between the Medical Officers of Health of London, Middlesex and other adjoining areas with a view to joint action in compliance with the requirements of the Public Health (Venereal Diseases) Regulations, 1916. Arising out of these conferences, and with the assistance of the officers of the (then) Local Government Board, a joint scheme for the treatment of venereal diseases was formulated, and the County Councils of London, Middlesex, Bucks, Essex, Herts, Kent and Surrey, together with the Councils of the County Boroughs of Croydon, East and West Ham, became participating authorities. The essential feature of the scheme was agreement with certain hospitals in London that patients resident in any of the areas of the participating authorities should receive treatment for venereal diseases at the hospitals, and that payment in the form of grants should be made by the London County Council, and subsequently the cost shared between the participating authorities on the basis of user.

The scheme has proved extremely satisfactory in its working, and by means of periodical conferences between the medical officers of the participating authorities, suggestions for the need for improvement in respect of any facilities provided can be discussed and, with the approval of the authorities and the Ministry of Health, suitable action taken.

The chief directions in which alterations have been effected since the scheme came into operation in 1917 have been the inclusion of additional hospitals, increase or reduction of the grant payable to various hospitals, inclusion in the scheme of hostels for young women suffering from venereal

disease whose residential circumstances render efficient treatment difficult or impossible, and encouragement given to various hospitals to secure the establishment of clinics open all day.

The provision of facilities for treatment available throughout the whole day enables persons suffering from, or suspecting themselves to be suffering from, venereal disease to visit the clinics without appointment at any time, and to be sure of obtaining skilled advice and treatment if needed. The essential requirement that treatment shall be commenced as soon as possible after infection has been acquired is well met by the " all-day " clinic, and the increasing attendances following the opening of such clinics confirm their value.

In addition to participating with London and other authorities in a joint scheme for the treatment of venereal diseases centred round the hospitals in London, an agreement was entered into in 1917 between the Middlesex County Council and the Prince of Wales's Hospital, Tottenham, the only large general hospital in the County, for the establishment of a venereal diseases clinic at that institution, in order to meet the needs of the large industrial population residing in the districts in the northern part of the County.

In 1919, by arrangement with the County Council of Surrey and the Richmond Hospital, a clinic was started at this institution ; the working of the clinic is supervised by the Surrey County Council, and the Middlesex County Council contributes towards the cost.

The following is a list of hospitals at which, under the Council's scheme, treatment can be obtained, with the days and times at which the clinics are available for the use of patients :—

Hospitals in London.

Albert Dock, Royal Albert Docks, E. 16.—*Male,* Monday, Tuesday, Wednesday, Thursday, Friday, 9 a.m. to 6 p.m. ; Saturday, 9 a.m. to 1 p.m. *Female,* Tuesday, 4 to 6 p.m.

Charing Cross, Agar Street, Strand, W.C. 2.—*Gonorrhœa—Male,* Friday, 6 p.m. to 8 p.m. *Female,*

Wednesday, 6 p.m. to 8 p.m. *Skin—Male and Female,* Monday, 4 to 6 p.m.

Elizabeth Garrett Anderson Hospital for Women, 144, Euston Road, N.W. 1.—*Disorders of Women*—Tuesday and Friday, 6.30 to 7.30 p.m.; Saturday, 9 a.m. *Skin*—Friday, 6.30 to 7.30 p.m.; Saturdays, 9 a.m.

Guy's, St. Thomas Street, S.E. 1.—*Males, Females and Children,* daily treatment between 9 a.m. and 8 p.m. Bank Holidays, 10 a.m. to noon.

Hospital for Diseases of the Skin, 71, Blackfriars Road, S.E. 1.—*Male and Female,* any day (except Sunday), 2 to 3 p.m.; Tuesday and Friday, 6 to 7 p.m. *Female and Children only,* Tuesday and Friday, 4 to 5 p.m.

Hospital for Sick Children, Great Ormond Street, W.C. 1.—*Male and Female Children,* any day (except Sunday), 9 to 10 a.m.; Monday, Tuesday, Thursday and Friday, 2 to 4 p.m.

King's College, Denmark Hill, S.E. 5.—*Syphilis—Male,* Tuesday, 5.30 p.m.; Wednesday, 11.30 a.m.; Thursday, 2.30 p.m.; and Friday, 11.30 a.m. *Female,* Tuesday, 5 p.m.; Wednesday, 11 a.m.; Thursday, 2 p.m.; Friday, 11 a.m. *Gonorrhœa—Male,* Monday, 2 p.m.; Thursday, 5 p.m. *Female,* Monday and Wèdnesday, 6 p.m.; Friday, 2 p.m.

London Lock, 91, Dean Street, Soho, W. 1.—*Male,* Monday, 1 p.m. to 2 p.m., 6 p.m. to 8 p.m.; Tuesday, 1 p.m. to 2 p.m., 6 p.m. to 8 p.m.; Wednesday, 6 p.m. to 8 p.m.; Thursday, 1 p.m. to 2 p.m.; Friday, 5 p.m. to 7 p.m.; Saturday, 2 p.m. to 4 p.m. *Female and Children,* Thursday, 5 p.m. to 7 p.m.

London Lock, 283, Harrow Road, W. 9.—*Female and Children,* daily treatment between 8 a.m. and 10 p.m., and on Bank Holidays.

London, Whitechapel Road, E. 1.—*Gonorrhœa—Male and Female,* daily treatment between 9.30 a.m. and 7 p.m. *Syphilis—Male and Female,* Monday, 5 to 7 p.m.; Tuesday and Thursday, 8.30 a.m. to 12 noon; Wednesday, 10 a.m. to 12 noon.

Metropolitan, Kingsland Road, E. 8.—*Male and Female*, Monday and Friday, 6 to 7 p.m.; Wednesday, 12 noon to 1 p.m.

Middlesex, Berners Street, W. 1.—*Skin—Children*, Tuesday and Friday, 1.30 p.m. *Male*, Tuesday and Friday, 2.15 p.m. *Female*, Tuesday and Friday, 3 p.m. *Syphilis—Male and Female*, Monday and Thursday, 6 to 8 p.m.; Tuesday and Friday, 2.30 p.m. *Gonorrhœa—Male*, daily treatment between 8 a.m. and 8 p.m. *Female*, daily treatment every morning, 9.30 a.m. to 11 a.m., and every evening, 5.30 p.m. to 8.30 p.m.

Miller General, Greenwich, S.E. 10.—*Male and Female*, daily treatment between 8 a.m. and 8 p.m.; Bank Holidays, from 11 a.m. to noon.

Royal Free, Gray's Inn Road, W.C. 1.—*Females and Children*, daily treatment between 7 a.m. and 9.30 p.m.

Royal London Ophthalmic (Moorfields), City Road, E.C. 1.—*Male*, Monday and Friday, 5.30 p.m. *Female*, Wednesday, 1.30 p.m.

Royal Northern, Holloway Road, N. 7.—*Skin—Male, Female and Children*, Wednesday and Thursday, 1 p.m. *Syphilis—Male*, Monday, Wednesday, Thursday, Friday, 6 p.m. to 8 p.m. *Female and Children*, Tuesday and Thursday, 6 p.m. to 8 p.m., and 2.30 p.m. to 4.30 p.m. Mondays. *Gonorrhœa—Male*, Monday, Tuesday, Wednesday, Thursday, Friday, 6 p.m. to 8 p.m. *Female and Children*, Monday, Tuesday, Thursday, 6 p.m. to 8 p.m., and 2.30 p.m. to 4. 30 p.m. Mondays.

St. George's, Hyde Park Corner, S.W. 1.—*Skin—Male and Female*, Monday (Syphilis), Wednesday (Gonorrhœa) and Friday (Syphilis), 6 to 7 p.m.; Wednesday (Skin), 2 p.m.; Friday (Syphilis), 2 to 3 p.m. *Disorders of Women*—Monday and Thursday, 2.30 to 4.30 p.m.

St. John's (Lewisham), Morden Hill, Lewisham, S.E. 13.—*Male, Female and Children*—Daily treatment between 9 a.m. and 10 p.m.

St. Mary's, Cambridge Place, Paddington, W. 2.—*Male*, Tuesday and Friday, 6 to 7 p.m. *Female*, Wednesday, 5 to 7 p.m.

St. Paul's, Endell Street, W.C. 2.—*Males, Females and Children*—Daily treatment between 8 a.m. and 10 p.m. Sundays and Bank Holidays from 10 a.m. to noon, and 6 to 8 p.m.

St. Thomas's, Westminster Bridge Road, S.E. 1.—*Males, Females and Children*—Daily treatment between 8 a.m. and 10 p.m. Sundays and Bank Holidays from 10 a.m. to noon.

Seamen's Greenwich, S.E. 10.—*Males*, Monday, Tuesday and Wednesday, 7 to 9 p.m. Note.—If merchant seamen are unable to attend at these hours they may present themselves for treatment at any other time.

South London for Women, 86–90, Newington Causeway, S.E. 1.—*Female and Children*—Tuesday, 6 to 8 p.m.; Wednesday, 10 a.m.; and Friday, 6.30 to 8.30 p.m.

University College, Gower Street, W.C. 1.—*Special (Venereal)—Male*, Monday, Wednesday and Friday, 5.30 to 7 p.m.; Saturday, 1.30 to 3 p.m. *Female*, Monday and Friday, 5.30 to 7 p.m. Patients can also be seen daily from 10 a.m. to 4 p.m.

West London, Hammersmith Road, W. 6.—*Male and Female*, any day (except Sunday) from 5.30 to 6.30 p.m.

Westminster, Broad Sanctuary, S.W. 1.—*Male and Female*, new cases any day (except Saturday and Sunday) up to 1 p.m. Special Sessions, Monday, Tuesday, Wednesday and Thursday, 5.30 to 7.30 p.m.

Hospital in Middlesex.

Prince of Wales's, Tottenham, N. 15.—*Women*, Monday, 6.30 to 7 p.m.; Wednesday, 5.30 to 7 p.m.; Friday, 6.30 to 8 p.m. *Men*, Monday, 7 to 8 p.m.; Wednesday, 5.30 to 7 p.m.; Friday, 6.30 to 8 p.m. Irrigations, from 8 a.m. daily (except Sunday).

Hospital in Surrey.

Royal Hospital, Richmond.—*Male*, Tuesday and Friday, 5 p.m. to 7 p.m. *Women and Children*, Tuesday and Friday, 5 p.m. to 7 p.m. Irrigations, *Male only*, Mondays to Saturdays (inclusive), 6.30 a.m. to 8 a.m.

From the foregoing list it will be apparent that the provision made for the diagnosis and treatment of venereal

diseases (including the systematic irrigation of cases of gonorrhœa) is extensive. The only modification which would seem to be likely to improve the efficiency of the scheme is the establishment of one " all-day " clinic in each part of the area, so that facilities for treatment at any hour are available in all localities.

A return of the number of Middlesex patients treated during 1925 is given on page 139. This shows separately the number dealt with at the hospitals in the Joint London scheme, the number treated at the Prince of Wales's Hospital, Tottenham, and the number treated at Richmond Hospital, Surrey.

The total number of new cases from all areas dealt with at the London Hospitals was 26,182, of which 1,699, or 6·5 per cent., are credited to Middlesex, and the remainder to the other participating authorities in the joint scheme.

Compared with the figures of the previous year, 1924, the *number of new patients from Middlesex* shows a decrease of 67 in the case of the London hospitals, but it will be noted that the decrease in the number of patients found to be suffering from venereal diseases is larger still, viz., 115. In the case of the Prince of Wales's Hospital there is a total increase of 24 in the number of persons attending for the first time, but it will be seen on reference to the table that the actual increase in the number of new cases suffering from venereal diseases is only 4. The return from Richmond Hospital shows that there has been a decrease of 6 patients suffering from venereal diseases attending for the first time in 1925, as compared with the number of new cases of venereal diseases in 1924. The *attendances by Middlesex patients* increased by 29 at the London hospitals, decreased by 848 at the Prince of Wales's Hospital, and increased by 683 at Richmond Hospital.

In addition to the number of patients mentioned and set out in the table opposite, 24 Middlesex patients were treated during 1925 at hostels for the reception of pregnant women and of children suffering from venereal diseases, the aggregate number of days in residence being 2,536, which is equivalent to 11·0 per cent. of the total of all the participating authorities. The figures for 1924 were 24, 2,436 and 9·4 per cent. respectively.

	MIDDLESEX Patients treated at														
	London Hospitals.					Prince of Wales's Hospital, Tottenham.					Richmond Hospital.				
	1921.	1922.	1923.	1924.	1925.	1921.	1922.	1923.	1924.	1925.	1921.	1922.	1923.	1924.	1925.
Number of persons dealt with at the Clinics for the first time and found to be suffering from:—															
Syphilis	559	399	429	445	375	99	97	76	58	57	29	23	19	29	12
Soft chancre	31	13	15	7	9	2	5	5	1	1	—	—	—	—	—
Gonorrhœa	614	573	732	724	677	101	84	87	72	77	22	23	29	29	40
Not suffering from V.D.	432	403	458	590	638	90	94	83	71	91	15	11	23	31	41
Total	1,636	1,388	1,634	1,766	1,699	292	280	251	202	226	66	57	71	89	93
Total attendances	33,547	32,621	33,534	33,604	33,633	5,818	5,812	6,100	5,178	4,330	1,189	1,913	2,282	2,079	2,762
Number of "in-patients" days of treatment	2,981	3,855	3,662	3,342	3,342	172	128	106	154	152	—	—	—	—	—
Number of doses of arsenobenzol compounds given	4,850	4,265	3,534	3,484	3,575	460	535	382	516	530	503	323	207	258	281

The most satisfactory feature revealed by a survey of the figures for the past five years is the reduction in the annual number of persons found to be suffering from syphilis; soft chancre also is rapidly diminishing in frequency, but the total number of patients suffering from this complaint is small. On the other hand there is no evidence of decrease in the incidence of gonorrhœa. That public appreciation of the risks of venereal diseases and the necessity for skilled treatment and advice is growing, is shown by the fact that, although the total number of persons presenting themselves for examination and treatment each year shows little variation, the proportion found not to be affected with venereal disease increases year by year, and in 1925 had attained a proportion of 38·2 per cent. In previous years the figures were as follows:—1921, 26·92; 1922, 29·42; 1923, 28·82; 1924, 33·62.

(2) *Publicity arrangements.*—In order that knowledge of the facilities afforded by the Council's scheme may be widespread throughout the County, since the inception the County Medical Officer circulates all medical practitioners in the County each year, pointing out all the provisions of the scheme, enclosing a series of leaflets and forms in connection therewith, and also a list giving information as to the hospital facilities available similar to that set out on pages 134 *et seq.*, but in tabular form. In the case of local medical officers of health the hospital list is offered in poster form, and as many copies for display as may be desired are supplied. Practising midwives in the County, similarly, are supplied annually with information as to the scheme, and the list of hospitals, with days and times at which patients should attend, is forwarded to each.

An annual grant is paid to the British Social Hygiene Council by the County Council, and the former arranges for the carrying out of press propaganda by the insertion of suitable articles and notices in newspapers circulating in the County. Lastly, the County Council pays the cost of lectures, &c., provided by the British Social Hygiene Council on the subject of venereal diseases, if such lectures are desired or approved by the local district council in the area where it is proposed they should be given.

(3) *Arseno-benzol compounds.*—Under the Council's scheme medical practitioners (subject to certain conditions of approval laid down by the Ministry of Health), may receive free supplies of arseno-benzol compounds for the treatment of their own patients.

The number of doctors practising in Middlesex who applied during 1925 to be placed on the approved list was 3. The total number now is 53. In addition to these there is a considerable number of doctors in London, by many of whom Middlesex residents would be treated, who also are on the list of approved practitioners.

The total number of doses of approved arseno-benzol compounds, provided for the treatment of Middlesex residents by private practitioners during 1925, was 898.

All doctors in practice in the County may, without cost, consult with the medical officers of the treatment centres, receive instruction at the centres in modern methods of treatment of venereal diseases, and obtain reports on pathological materials submitted for examination.

The number of pathological examinations of specimens submitted by private practitioners in respect of Middlesex residents during 1925 was as follows :—

—	Hospitals in Joint Scheme.	Prince of Wales's Hospital, Tottenham.	Total.
For detection of spirochaetes	2	7	9
For detection of gonococci	251	90	341
For Wasserman reaction	2,011	478	2,489
Other examinations	47	—	47
Totals	2,311	575	2,886

N.B.—Pathological examinations are not undertaken for private practitioners at the Royal Hospital, Richmond.

No evidence came to the notice of the County Council which pointed to the treatment of patients suffering from venereal disease by persons other than duly qualified medical practitioners, nor was there evidence of any other breach of the Venereal Diseases Act, 1917.

Maternity and Child Welfare.

Administration of the Midwives Acts, 1902 and 1918.

The administration of the Midwives Acts, 1902 and 1918, in Middlesex is delegated by the County Council to the Maternity and Child Welfare Committee of the Council. The work of inspection, &c., is carried out under the control of the County Medical Officer, who is assisted by the Deputy County Medical Officer and by the Council's Inspectors of Midwives.

Notification of intention to practise and numbers of midwives in the County.—In accordance with the usual practice, notices and forms were sent at the end of 1924 to all midwives whose names appeared on the Midwives Roll residing or practising in the County, calling attention to the requirement of the Midwives Act, 1902, that they must notify the County Council if they had intention to practise midwifery during the coming year. During the course of 1925, when the Revised Roll was published, similar notices, &c., were sent to all newly qualified and any additional midwives whose residences were given as in Middlesex. The information thus obtained as to practising midwives was supplemented by notices received during the year from other certified practising midwives who came to reside in the County, either temporarily or permanently.

The result of these enquiries, &c., is shown in the following table, which shows the number of practising midwives in each sanitary district in the County :—

District.	Total number of midwives practising during 1925.	Removed from district during 1925.	Practising temporarily during 1925.	Number in district end of 1925.
Urban—				
Acton (Borough) ...	7	—	—	7
Brentford	4	1*	—	3
Chiswick	10	1	—	9
Ealing (Borough) ...	28	7	2	19
Edmonton	19	5	—	14
Enfield	11	—	—	11
Feltham	5	—	—	5
Finchley	8	—	—	8
Friern Barnet... ...	4	—	—	4
Greenford	1	—	—	1
Hampton	5	2†	—	3
Hampton Wick ...	—	—	—	—
Hanwell	2	—	—	2
Harrow	6	—	—	6
Hayes	2	—	—	2
Hendon	16	2	—	14
Heston and Isleworth	17	2	—	15
Hornsey (Borough) ...	11	—	—	11
Kingsbury	1	—	—	1
Ruislip-Northwood ...	3	—	—	3
Southall-Norwood ...	8	—	—	8
Urban—continued.				
Southgate	7	1	—	6
Staines	2	—	—	2
Sunbury	2	—	—	2
Teddington	3	—	—	3
Tottenham	22	1†	1	20
Twickenham	14	1	—	13
Uxbridge	3	—	—	3
Wealdstone	2	—	—	2
Wembley	12	2	—	10
Willesden	27	3†	2	22
Wood Green	11	—	1	10
Yiewsley	2	—	—	2
Rural—				
Hendon	4	—	—	4
South Mimms ...	—	—	—	—
Staines	9	1	2	6
Uxbridge	5	—	1	4
Extra County	61	1	12	48
Totals	354	30	21	303

* Dead.

† 1 removed from Roll by the Central Midwives Board.

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From the foregoing table it will be observed that out of 354 notices of intention to practise received during the year, 21 were from midwives engaged temporarily in the area, that 26 midwives left the area, 1 died and 3 were removed from the Midwives Roll by the Central Midwives Board, leaving a total of 303 practising midwives in the County at the close of 1925, an increase of 13 in the number at the end of the previous year. At the close of 1921 the number of practising midwives in Middlesex was 220; this number increased by 21 to 241 at the end of 1922; further increases of 25 and 24 respectively are recorded in the numbers at the end of 1923 and 1924, or a total increase during the past five years of 83. Throughout the County as a whole the supply of midwives is ample to meet all demands, and the increase in the number of practising midwives during the past five years would have sufficed to deal with the increased number of births which might have been expected to attend an increase in population of 53,428 persons. Owing to the fall in birth-rate, however, instead of an increase in births during this period we find a reduction of 3,658 in the total number of births in 1925. as compared with the number in 1921; it is evident, therefore, that the fees available from attendances at the confinements of the women who desire the services of certified midwives cannot be sufficient in themselves to afford a livelihood to all the practising midwives in Middlesex. The distribution of midwives in the various sanitary districts is somewhat unequal, but, with the exception of the Urban District of Hampton Wick and Rural District of South Mimms, no area is without one or more resident midwives. In the case of Hampton Wick the services of certified midwives residing in neighbouring districts are available without real inconvenience, but the position of South Mimms is not so satisfactory. This matter has been commented upon in previous reports, and up to the present no practical solution has been found; fortunately the total number of births in the village of South Mimms is small. It may be added that the County Council, under its scheme for Maternity and Child Welfare, has power to provide a temporary resident midwife to deal with any individual case, if accommodation can be found, and other

arrangements prove impracticable, and this procedure has been followed in certain cases.

In addition to the 354 certified midwives who notified their intention to practise in the area, a much larger number of fully qualified midwives reside in Middlesex, and either are employed at Poor Law institutions, and on this account exempted from supervision by the Local Supervising Authority, or are employed in health visiting, private nursing or other duties, and are not engaged in the practice of midwifery.

The total number of certified midwives residing or practising in the County during each of the past five years is shown in the following table :—

Year.	Intention to practise notified.	Employed in Poor Law Institutions.	Not engaged in Midwifery practice.	Total Certified Midwives.
1921	278	26	382	686
1922	301	35	507	843
1923	335	18	500	853
1924	341	20	497	858
1925	354	32	632	1,018

It will be noted that a total increase of 160 is recorded in the number of certified midwives in 1925 as compared with 1924, and that a comparable increase (*i.e.*, 157) is shown as between the numbers in 1921 and 1922, whilst the increase in the intervening years is negligible. An explanation is afforded by the fact that the complete roll of all midwives was published in the years 1922 and 1925 only, consequently information regarding all midwives who had received training in Middlesex and returned their addresses as at the institution in which they had been trained (although not practising in the County), as well as of all non-practising midwives who had removed into Middlesex in the intervening years, was available for the first time in the years 1922 and 1925.

Qualifications of Midwives in Practice.—The following table shows the qualifications of practising midwives during each of the past five years :—

Year.	Passed the examination of the Central Midwives Board.	Hold certificate of London Obstetrical Society.	Hold hospital certificates other than the L.O.S. certificate.	Enrolled by reason of having been in *bona fide* practice previous to the Midwives Act, 1902, coming into operation.	Total.
1921	195	37	4	42	278
1922	221	34	5	41	301
1923	265	32	2	36	335
1924	281	27	4	29	341
1925	298	29	2	25	354

Stress was laid in last year's report on the primary importance of a thorough knowledge of surgical cleanliness on the part of all who have anything to do with attendance on parturient women. The opinion was expressed that the risks to women which may result from failure to observe proper aseptic and antiseptic precautions, during and after parturition, are so serious that it is desirable midwifery training should be preceded by a complete course in general and surgical nursing when conditions throughout the country render this feasible. Meanwhile the Central Midwives Board have made more stringent the requirements as to training before candidates may sit for examination as midwives, and this undoubtedly is a step in the right direction. The County of Middlesex is fortunate in having a very small number of certified midwives residing therein who gained admission (without examination) to the Roll in virtue of having been in *bona fide* practice before the Act came into force. Whilst in 1907 (the earliest date on which the information is available), out of 209 practising midwives, 93, or 44·5 per cent., were *bona fide* midwives, by 1921 the proportion of *bona fide* midwives was reduced to 15·1 per cent., and this year the number has fallen to 25, or 7·1 per cent. of the total.

Uncertified Women.—No evidence was obtained during 1925 on which proceedings could be instituted against any unqualified woman for " habitually and for gain " exercising the calling of a midwife. In four instances, however, it was ascertained that unqualified women had attended at confinement, and letters warning them of the provisions of the Midwives Act were sent.

Number of Births attended by Midwives.—At the close of each year midwives who have notified their intention to practise are requested to furnish a return giving information as to the number of cases attended by them. Owing to removals from the County, delay in sending in the returns, deaths, &c., the figures so obtained cannot be treated as absolutely accurate, but they are sufficiently correct to afford useful information as to the extent to which midwifery is undertaken by midwives in the County.

From these returns it is found that midwives attended 10,164 births, or 47·2 per cent. of the total number of births registered in the County during 1925, and in addition acted as nurses to 1,820 cases under the care of doctors. Of the births attended by midwives, 1,054 (or 10·4 per cent.) were attended by *bona fide* midwives, and of the 1,820 doctors' cases, in 95 (or 5·2 per cent.) *bona fide* midwives were present as nurses. Information as to the number of births attended by midwives in each sanitary district in the County is given in the following table :—

Births Attended by Midwives.

—	Births attended by Midwives residing in each District, 1925.	Births where the Midwives acted as Nurses, 1925.
Urban—		
Acton (Borough)	270	79
Brentford	273	9
Chiswick	380	79
Ealing (Borough)	379	115
Edmonton	969	33
Enfield	438	70
Feltham	124	49
Finchley	74	60
Friern Barnet	156	22
Greenford	31	12
Hampton	117	28
Hampton Wick	—	—
Hanwell	63	11
Harrow	133	75
Hayes	159	35
Hendon	264	95
Heston and Isleworth ...	561	114
Hornsey (Borough) ...	333	118
Kingsbury	1	—
Ruislip-Northwood ...	47	26
Urban—continued.		
Southall-Norwood	206	27
Southgate	86	49
Staines	38	7
Sunbury	104	8
Teddington	185	51
Tottenham	1,362	28
Twickenham	359	82
Uxbridge	125	36
Wealdstone	91	2
Wembley	55	77
Willesden	865	92
Wood Green	265	57
Yiewsley	67	8
Rural—		
Hendon	8	56
South Mimms	—	—
Staines	183	76
Uxbridge	113	9
Extra County	1,280	125
TOTAL	10,164	1,820

Notifications.—The number of notifications received from midwives during 1925, in accordance with the Rules of the Central Midwives Board, together with similar figures for the previous four years, are as follows :—

——	1921.	1922.	1923.	1924.	1925.
Notifications of—					
Sending for medical assistance	1,366	1,252	1,244	1,331	1,615
Still-birth	159	142	141	163	128
Death of infant....	(*25*)	(*19*)	(*14*)	73	103
Death of mother....	(—)	(—)	(—)	5	2
Laying out the dead	9	10	16	22	34
Artificial feeding	30	49	53	43	55
Liability to be a source of infection	28	39	33	34	56
Totals	1,617	1,511	1,501	1,671	1,993

Comparison of the total number of *notifications of still-births* with the total number of live births attended by midwives (set out in column 5 of the table on page 157), shows that there is little variation in the proportions from year to year. The proportion of still-births to live births amongst midwives' cases during the past five years being : 1921, 14 per 1,000 ; 1922, 1923, 13 per 1,000 ; 1924, 16 per 1,000 ; and 1925, 13 per 1,000. Systematic inquiry into the possible or probable cause of still-birth amongst cases attended by midwives is always made with a view to obtaining information which, ultimately, may indicate in what direction preventive measures should proceed. The subject is one of much difficulty, but the following particulars with regard to the 128 still-births in 1925 may be of interest :—

STILLBIRTHS.

Probable (or possible) cause.	Fœtus 8 months old or over.			Fœtus under 8 months old.			Totals.
	Macerated.	Not Macerated.	Total.	Macerated.	Not Macerated.	Total.	
1. *Maternal conditions*—							
Acute infectious diseases	4	—	4	—	—	—	
Probable venereal disease	3	—	3	1	—	1	
Epilepsy	—	—	—	—	1	1	
Malnutrition	—	—	—	1	—	1	
Albuminuria	—	—	—	2	—	2	
Excessive sickness during pregnancy	1	—	1	—	—	—	
Ante-partum hæmorrhage (? cause)	—	5	5	3	1	4	
Drug-taking admitted	1	—	1	1	—	1	
	9	5	14	8	2	10	24
2. *Developmental errors*—							
Spina bifida	—	—	—	1	—	1	
Hydrocephalus	1	—	1	—	—	—	
Deformities (various)	5	1	6	1	1	2	
Malnutrition—							
1 of twins	—	2	2	1	1	2	
1 of triplets	—	1	1	—	—	—	
? cause	—	2	2	—	—	—	
Post mature fœtus	1	—	1	—	—	—	
	7	6	13	3	2	5	18

3. *Asphixia in utero*—							
Twisted, knotted and prolapsed umbilical cord	3	9	12	—	—	—	12
4. *Conditions during labour*—							
Early rupture of membranes, prolonged labour, &c.	—	6	6	—	1	1	
Inattention at birth (B.B.A.)	—	3	3	—	—	—	
	—	9	9	—	1	1	10
Total	19	29	48	11	5	16	64
5. *No cause ascertained*—							
(*a*) Reasons assigned by mother—							
Emotional—worry, fright, &c....	13	2	15	4	1	5	20
Physical—fall, blow, lifting weight, &c.	10	4	14	2	2	4	18
Various maternal conditions, *e.g.*, cough, heart attack, fainting fit, &c.	2	—	2	4	—	4	6
	25	6	31	10	3	13	44
(*b*) No reason suggested by mother	7	6	13	5	2	7	20
Total	32	12	44	15	5	20	64
Grand Totals	51	41	92	26	10	36	128

It will be noted that a recognised and probable cause of still-birth is recorded in 64 cases (or 50 per cent. of the total). With regard to the remaining 64, they must be classified as "cause unknown," although in only 20 instances was the woman affected not prepared to offer an explanation to account for the death of her unborn infant.

Many points of interest repay a careful study of the information contained in the table, but from a practical standpoint the immediate importance of the findings is threefold :—

(1) Many of the conditions set out in group 1 are amenable to ante-natal treatment, and others in group 4 can be guarded against with improved ante-natal supervision.

(2) The high proportion of full-time infants in an unmacerated state shown in group 3 suggests that in many instances death has occurred in the earlier stages of labour. Possibly increased care during delivery may help to reduce still-birth from these causes.

(3) In the present state of our knowledge it is not possible to influence the causes set out in groups 2 and 3, moreover, there remain 64 still-births for which no pathological cause has been ascertained. Further research on the whole subject is needed, including investigation as to the causal significance, if any, of the various reasons advanced by the women concerned.

The number of *notifications of the deaths of infants* shows an increase of 30 as compared with the figures for 1924. Comparison with previous years is not possible, as prior to 1924, notification of the death of an infant was not required if a doctor was in attendance before the death occurred. As in the case of still-births so in the case of infant deaths, enquiry is made by the Council's Inspectors of Midwives into all cases, and so far as can be ascertained the deaths during 1925 can be attributed to the following causes :—

INFANT DEATHS.

Probable (or possible) cause.	Infant 8 months or over.	Infant under 8 months	Total.
(1) *Conditions affecting mother*—			
Venereal disease	—	1	1
Albuminuria	1	—	1
Ante-partum hæmorrhage (? cause)....	—	3	3
,, ,, Placenta prævia	—	1	1
Drug taking admitted....	—	2	2
Total	1	7	8
(2) *Conditions affecting infant*—			
(*a*) *Before birth*—			
Congenital heart disease	9	1	10
Monster	1	—	1
Mongol	1	—	1
Deformity of tongue leading to suffocation....	1	—	1
Cleft palate or harelip	2	1	3
Deformity (other)	1	—	1
Malnutrition (one of triplets)	1	—	1
	16	2	18
(*b*) *During birth*—			
Prolonged labour, instrumental delivery, &c.	5	1	6
White asphixia (probable prolonged labour)	3	—	3
Inattention at birth (B.B.A.)	1	1	2
	9	2	11
(*c*) *After birth*—			
Atelectasis	1	—	1
Thrombosis	1	—	1
Embolism	1	—	1
Meningeal hæmorrhage (inquest—cause not known)....	—	1	1
"Convulsions"	4	1	5
Pemphigus	1	—	1
Pneumonia	2	—	2
"Colic"	1	—	1
Accidental death from suffocation	3	—	3
	14	2	16
Total	39	6	45

Probable (or possible) cause.	Infant 8 months or over	Infant under 8 months	Total.
(3) *Prematurity and feebleness*—			
Precipitate labour following fright	1	—	1
Precipitate labour following fall	1	—	1
No history of precipitate labour and no cause for condition suggested or ascertained	20	28	48
Total	22	28	50
Grand Totals	62	41	103

It will be noted that the majority of deaths are considered to be due to prematurity, and it is probable that many of the factors which conduce to premature birth may in other instances lead to still-birth. Support to this hypothesis is afforded by comparison of the total still-births and infant deaths for the years 1924 and 1925, whilst the rate of infant mortality during the first 10 days has increased from 7 per 1,000 births to 10 per 1,000 births; the ratio of still-births has diminished from 16 per 1,000 to 13 per 1,000, and the summation of these two produces a constant rate of 23 deaths per 1,000 births in each of the two years. Attention also may be called to the reduction in deaths in group 1 and group 2 (*b*), which increased ante-natal supervision should effect, but with regard to " prematurity " much more research still is required. One of the difficulties which, at present, appears almost insurmountable, is ability to obtain reliable evidence of the number of cases in which accidental hæmorrhage, premature labour, and prematurity are the direct results of intentional action on the part of the mother.

The number of *notifications of deaths of mothers*, in addition to not being comparable with any previous figures except those for 1924 (as in the case of notifications of infants' deaths), is in itself misleading as a guide to the maternal mortality amongst midwives' patients. The reason for this is, that in the event of a woman being

removed to hospital after labour, and subsequently dying in hospital, she would at that time not be under the midwife's care, and no notification of death is required from the midwife. Complete information of such deaths, however, is always obtained, and during 1925 a total of eight deaths occurred amongst midwives' patients, *i.e.*, two for which notifications were received, and six subsequent to admission to hospitals. Eight deaths amongst midwives' patients gives a maternal mortality rate for 1925 of 0·8 per 1,000 births attended by midwives, as compared with 2·69 per 1,000 births for the County as a whole. This is a phenomenally low rate, and it is to be feared that some increase may be experienced in future years.

Of the eight deaths, five were of cases notified to be suffering from puerperal fever, and these are discussed more fully on page 158. With regard to the remaining three, one was due to eclampsia ; in this case the patient had been under treatment for albuminuria, eclampsia supervened before labour commenced, the patient was removed at once to hospital, but died undelivered ; the second case was one of obstructed labour in a multipara, due to twins ; a doctor was in attendance, off and on, for 16 hours ; during labour he administered chloroform, but failed to deliver, and the patient collapsed and died ; whilst the third death was due to the patient committing suicide six days after labour. It will be noted, therefore, that none of these three deaths can be attributed to lack of professional care on the part of the midwives.

Notifications of sending for medical assistance fall into four main groups according to whether they relate to conditions arising in pregnancy, during labour, subsequent to confinement, or affecting the newly born infant. Comparison of the numbers of medical aid notifications received during the past five years shows that there has been a marked increase in the total for 1925, although the number of births in this year is the lowest during the period under review. At the same time especially marked is the increase in the number of occasions on which medical assistance has been sought during pregnancy. Whilst in 1921, 1922, and 1923 the proportion of ante-natal notifications to total notifications varied from 4·4 per cent. to 4·8 per cent., in 1924

this had increased to 6·2 per cent., and in 1925 to 7·8 per cent. These figures indicate the realisation by midwives of the protection, to patients and midwives alike, which adequate ante-natal examination confers, and also show the increasing appreciation on the part of midwives of the importance of calling in medical aid whenever there is any complication or abnormality present during and after labour.

The figures for the five years are as follows :—

——	1921.	1922.	1923.	1924.	1925.
Ante-natal	66	56	60	82	127
During labour	723	625	576	714	859
During lying-in period	180	172	241	141	185
For infant	397	399	367	394	444
Totals	1,366	1,252	1,244	1,331	1,615

Puerperal Fever.—The number of patients attended by midwives and notified as suffering from puerperal fever during 1925 was 18, equivalent to 29 per cent. of the total number in the County. Information as to the occurrence of puerperal fever in Middlesex during the past 10 years is given in the following table :—

Year.	Total number of Registered Births.	Total number of cases of Puerperal Fever notified.	Total number of deaths from Puerperal Sepsis.	Number of births attended by Midwives.	Cases of Puerperal Fever in practices of Midwives.	Deaths from Puerperal Sepsis amongst Midwives' cases.
1916	25,524	72	34	10,871	18	10
1917	20,422	41	20	8,875	13	4
1918	19,010	33	28	8,426	11	5
1919	20,569	68	35	9,526	15	3
1920	29,842	79	49	12,396	20	7
1921	25,191	80	34	11,300	18	5
1922	23,775	57	35	10,884	17	6
1923	23,172	67	36	10,246	16	6
1924	21,993	55*	34	10,218	16*	5
1925	21,533	62	25	10,164	18	5

* These figures relate to the period of 53 weeks ended 3rd January, 1925.

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Enquiry into the circumstances of the 18 notified cases of puerperal fever affords the following information :—

All cases were admitted to hospitals or Poor Law institutions, and the majority were notified from the institutions.

Six appear to have been cases of puerperal sepsis without any apparent cause, and of these two died.

Three were similar cases, but the babies were born before the arrival of the midwife ; of these cases one died.

Two were cases of sepsis, in one of which there was retention of membranes, and in one the placenta was adherent, and was removed manually. Both recovered.

One was a case of sepsis which apparently recovered, but patient died suddenly in hospital six weeks after delivery, and whilst walking about the wards.

One patient developed a slight rise of temperature seven days after a delivery which had been complicated by excessive post partum hæmorrhage ; the presence of sepsis seems doubtful.

One patient developed a raised temperature of short duration with no other symptoms, and this was probably due to emotional causes.

One case had been under treatment for albuminuria during pregnancy ; her temperature was over 100° F. before delivery, and she gave birth to a macerated fœtus.

One case complained of pain on the right side before delivery ; she was removed to hospital on the third day after her confinement, and found to be suffering from appendix abscess ; no infection of the genital tract. She died after operation.

One patient had albuminuria during pregnancy ; during labour her perineum was torn, and was sutured the same day. Her temperature became

raised on the fifth day, and remained above normal. She recovered in due course.

One patient made normal progress, had resumed her ordinary duties, and on the twelfth day after delivery was seen in a local public-house; 17 days after labour, however, her temperature became raised, she was removed to the local infirmary and notified as a case of puerperal fever. She made good recovery.

From the above statement it will be seen that notification is not a very reliable index of the presence of septic infection of the generative system, as in one third of the notified cases there is evidence or suspicion that the rise of temperature which occasioned the notification was not due to "puerperal fever," and only four of the five deaths were puerperal in origin. On the other hand midwives are obliged to call in medical assistance in any case in which a patient's temperature remains at or above 100·4° F. for 24 hours with quickening of the pulse, and enquiry into the 79 notices received from midwives in this connection leads to the conclusion that in several cases sepsis was the cause of the pyrexia, although the medical men who took charge of the cases were not prepared to notify the patients as suffering from puerperal fever.

Accepting the notification and death figures, 18 and 5 respectively, as correct, and reducing the total of births attended by midwives as set out on page 64 to 8,884, the incidence rate of puerperal fever amongst midwives' cases is equal to 2·0 per 1,000 births and the death-rate due to puerperal fever amongst midwives' cases is equal to 0·56 per 1,000 births.

Ophthalmia Neonatorum.—The Rules of the Central Midwives Board require midwives to send for medical aid in all cases in which an infant has "inflammation of, or discharge from, the eyes, however slight." This provision of the Rules ensures that medical assistance is available before the eyes can be said to be affected with true ophthalmia, and in practice many cases to which a doctor has been summoned prove to be temporary and trivial in

character, and speedily clear up under treatment. The following particulars confirm the conscientious manner in which Middlesex midwives conform to the Rule :—

Cases in which a doctor was called in on account of infants' eyes	154
Cases which proved not to be ophthalmia neonatorum	107
Cases later notified as ophthalmia neonatorum...	47
Cases in which permanent injury to vision resulted	Nil

Pemphigus Neonatorum.—In June, 1925, Circular 593 was received from the Ministry of Health, calling attention to the occurrence of several outbreaks of the above disease in connection with maternity homes in this country, and forwarding a Memorandum on the matter. The Memorandum dealt in a comprehensive manner with the character, mode of infection, spread, treatment and prevention of the condition.

The disease is of a highly contagious nature, and is characterised by the development of vesicles or blisters on the skin of newly-born infants. It usually occurs between the fourth and fourteenth day after birth. Whilst some cases are of a mild character, in others the disease assumes a serious type, and the mortality in the latter group is high.

Although there had not been any extensive outbreaks of this disease in Middlesex during recent years, cases have occurred from time to time, and copies of the Memorandum were circulated to medical men and midwives practising in the County.

Since this action was taken a small outbreak in which three infants and one midwife were infected occurred, and one infant died; a further outbreak, affecting 18 babies up to the close of 1925, has occurred in a lying-in institution, but fortunately the type of disease has been extremely mild, and no serious results have ensued. Active steps have been taken by the local medical officer of health with a view to discovering and removing the cause.

Visits of Inspection.—The number of visits made by the inspectors during 1925 was as follows :—

Visits to	notified midwives	1,143
,,	midwives who have not notified ...	31
,,	women not certified under the Midwives Act	63
,,	patients' homes in connection with cases of ophthalmia, &c.	327
,,	other persons in connection with investigations under the Midwives Acts	161
,,	premises in connection with the registration of lying-in homes ...	228
	Total	1,953

The above visits to midwives include routine visits of inspection, enquiry into all notifications as to sending for medical aid, &c. Any notification relating to high temperature, inflammation of, or discharge from, infants' eyes, puerperal fever, rash on infants, or liability to be a source of infection, is dealt with as "urgent," and the midwife is visited at once, in order to ensure that every precaution is taken against the spread of infection, and that efficient treatment has, in fact, been obtained.

Action taken.

Five midwives were reported to the Central Midwives Board during the year, three were removed from the Roll, one was cautioned. The remaining case was not heard until January, 1926.

On the instruction of the Maternity and Child Welfare Committee, cautionary letters were sent to two certified midwives and four women not certified under the Midwives Act.

27 certified midwives and 10 other women were cautioned by the Inspectors.

Payment of Fees to Medical Practitioners.—In accordance with the provisions of Section 14 of the Midwives Act, 1918,

the County Council is required to pay the fees of any doctors called in by midwives in accordance with Rule E 20 of the Central Midwives Board. A scale of fees has been prescribed by the Ministry of Health, and certain conditions as to cases in which payments cannot be made are laid down therein. The County Council have the further duty of recovering from the patient, her husband, or other person liable for her maintenance, the fees paid, except in cases of poverty.

Information as to this branch of the Council's work during the past five years is given in the statement on page 163, and from this it will be noted that, although the number of claims received from doctors increases each year, the proportion these bear to the total number of occasions on which medical assistance has been called in, has shown a definite reduction during the past two years.

FEES PAID TO MEDICAL PRACTITIONERS UNDER SECTION 14 OF THE MIDWIVES ACT, 1918.

Year.	A. Number of notifications of sending for Medical Aid.	B. Number of Claims for fees received.	Percentage of B to A.	C. Total amount due to Doctors in respect of cases attended by them during financial year.				D. Income received from Patients in respect of Doctors' fees.			
					£	*s.*	*d.*		£	*s.*	*d.*
1921	1,366	503	36·9	1921–22	822	1	0	1921–22	106	15	6
1922	1,252	573	45·7	1922–23	790	4	6	1922–23	125	10	10
1923	1,244	614	49·4	1923–24	683	9	0	1923–24	205	17	4
1924	1,331	622	46·7	1924–25	901	7	6	1924–25	224	6	2
1925	1,615	720	44·6	1925–26	885	10	0	1925–26	396	3	11

Lectures to Midwives.—Attention was called in last year's report to arrangements which had been made for a systematic course of six lectures to be given by Dr. Ash, the late Deputy County Medical Officer, to each of the three local associations of practising midwives which have been formed in the County. These lectures were given during the winter 1924–25, and were greatly appreciated. An indication of the keenness of the midwives in the County to acquire instruction in the most recent teaching with regard to midwifery practice, is shown by the fact that full attendances were maintained and earnest requests have been received for the giving of a further course in the coming winter. It is proposed to make arrangements for Dr. Macaulay, the Deputy County Medical Officer, to commence this second course after the summer vacation.

Registration of Lying-in-Homes.

In a survey of the public health developments in Middlesex during the past five years reference must be made to the valuable advance in the provision for the care of women during their confinements which the passing of the Middlesex County Council (General Powers) Act, 1921, achieved. Under this Act authority was granted to the Council to enforce the registration with the Council of all "lying-in homes" in the County, *i.e.*, "any premises used or represented as being or intended to be used (whether regularly or on any occasion) for the reception of women for the purposes of child-birth where any payment or reward is made or given by or on behalf of any woman received therein in respect of such reception." Details of the Act, so far as it relates to the Registration of Lying-in Homes, were set out in the Annual Report for 1922, and the Annual Report for 1923 contained the text of the bye-laws passed by the Council under Part VI of the Act.

The administration of the lying-in clauses of the Act has been delegated to the Maternity and Child Welfare Committee of the Council, and the County Medical Officer, Deputy County Medical Officer and two Inspectors of Midwives have been duly authorized to carry out inspections, etc., under the terms of the Act. After existing lying-in

homes had been somewhat leniently dealt with, the Committee made their requirements more stringent before granting registration, and their action is intended to ensure that all registered homes shall have adequate and suitable accommodation and equipment, and be under the charge of a person with adequate knowledge and training in the importance of adherence to the principles of surgical cleanliness.

Particulars as to registration since the Act came into operation in 1922 are as follows :—

Year.	On Register at beginning of year.		Applications received.	Applications voluntarily withdrawn.	Registrations refused.	Registrations granted.	Applications held over or postponed.	Removed from Register on account of death or removal, or voluntarily	Registration cancelled.	On Register at close of year.	
	Number of homes.	Approved accommodation (beds).								Number.	Accommodation.
1922....	—	—	106	4	4	98	—	4	Nil	94	293
1923....	94	293	25	4	—	21	—	9	Nil	106	339
1924....	106	339	31	3	4	21	3	17	Nil	110	359
1925....	110	359	27	3	2	18*	5	10	Nil	118	366

* One application received previous year.

Rather more than half (viz., 68) of the 118 lying-in homes in the County belong to certified midwives. In the case of 36 of these homes the midwives restrict their practice to the in-patients at their establishments. The 32 homes belonging to midwives, who engage in district work in addition to receiving resident cases, have accommodation for 76 cases. Six of these, with accommodation for a total of 30 patients, have two certified midwives resident thereat, and this ensures a qualified midwife being available at the home during the absence of her partner on district work. In the 26 homes where this practice does not obtain the number of patients which can be accommodated is small, viz., 3 cases each at 3 homes, 2 cases each at 14 homes, and 1 case each at 9 homes.

In addition to the lying-in homes registered by the Council, 5 homes belonging to medical practitioners are exempted from registration in virtue of the provisions of Section 56 of the Act. During 1925, a total of 228 visits to premises for which application for registration had been received, as well as to existing registered lying-in homes, was made by the Council's Inspectors of Midwives, accompanied, where circumstances indicated the need, by the County Medical Officer or his Deputy. Six instances were discovered in which women had been admitted for their confinements to premises which were not on the Council's Register. The circumstances of each case were considered by the Maternity and Child Welfare Committee, and letters of warning calling attention to the provisions of the Middlesex County Council (General Powers) Act, 1921, were sent. No evidence of any further breach of the Act has been obtained.

The following table shows the number of registered lying-in homes, with accommodation, in each sanitary district in the County :—

District.	Number of Lying-in Homes on Register.	Approved Accommodation (Beds).
Urban—		
Acton (*Borough*)	5	15
Brentford	2	4
Chiswick	5	15
Ealing (*Borough*)	15	58
Edmonton	3	9
Enfield	1	3
Feltham	1	3
Finchley	5	12
Friern Barnet	2	5
Greenford	—	—
Hampton	3	7
Hampton Wick	—	—
Hanwell	3	3
Harrow	3	15
Hayes...	—	—
Hendon	6	13
Heston & Isleworth ...	5	11
Hornsey (*Borough*)	14	46
Kingsbury	—	—
Ruislip-Northwood	—	—
Southall-Norwood	—	—
Southgate	4	17
Staines	1	1
Sunbury	—	—
Teddington	3	8
Tottenham	5	14
Twickenham	5	24
Uxbridge	1	6
Wealdstone	—	—
Wembley	2	11
Willesden	12	36
Wood Green	4	10
Yiewsley	—	—

District.	Number of Lying-in Homes on Register.	Number of Beds available.
Rural—		
Hendon	7	18
South Mimms	—	—
Staines	1	2
Uxbridge	—	—
The County	118	366

Maternity and Child Welfare Scheme.

The County Council's scheme for Maternity and Child Welfare work has been in operation since 1919, and applies to 14 districts in the Administrative County, viz., the Urban Districts of Feltham, Friern Barnet, Greenford, Hampton Wick, Hayes, Kingsbury, Ruislip-Northwood, Staines, Sunbury and Yiewsley, and the Rural Districts of Hendon, South Mimms, Staines and Uxbridge. Several of the proposals included in the original scheme were for the provision of services entailing considerable capital expenditure, and the Council decided to develop these gradually as experience indicated the need. Later financial stringency led to a halt in new proposals, and efforts were concentrated on the consolidation of existing activities.

A review of the work of the past five years reveals the fact that steady progress has been made, and although only one additional centre was opened during this period and one discontinued, leaving the total number of 23 unchanged, the annual attendances of mothers, infants and young children have increased by nearly 9,000. Similarly, the number of home visits made by the health visitors has increased by close upon 10,000. Comparative figures for the past five years are shown overleaf :—

	1921.	1922.	1923.	1924.	1925.
Welfare Centres—					
Number of sessions held	1,114	1,113	1,148	1,174	1,166
New cases attending—					
Expectant mothers	97	48	66	118	150
Infants under 1 year of age	1,008	890	873	1,020	1,044
Children (1 to 5 years)	454	441	437	531	523
Total attendances made—					
Expectant mothers	718	739	686	986	1,215
Other mothers attending with infants	23,746	21,950	23,776	25,195	26,769
Infants	16,271	13,473	14,967	16,495	16,610
Children	13,053	14,184	15,524	18,103	20,161
Total attendances	53,788	50,346	54,953	60,779	64,755
Average attendance of infants and children each session	26·3	24·85	26·56	29·47	31·54
Home visits made by Health Visitors—					
Ante-natal visits	—	—	1,541	1,722	1,846
Visits to infants under 1 year	—	—	11,108	12,289	13,464
Visits to children (1 to 5 years)	—	—	14,473	16,669	17,901
Total home visits	23,805	24,724	27,122	30,680	33,211
Total number of visits to individual families	—	—	18,192	20,371	21,823

In consequence of the continued growth in the number of attendances at the various welfare centres indicated by the previous table, it was found that the utility of several of the larger centres was becoming impaired owing to congestion. In 1925 the whole subject was taken into consideration by the County Council, and as a result it was decided to arrange for a second session each week to be held at the four welfare centres where the attendances were the highest, and in addition to establish two new welfare centres in neighbourhoods which were somewhat remote from existing centres. Subsequently, it was decided to relieve the congestion at two of the larger centres mentioned above by the opening of additional centres, situated some distance away, instead of holding a second session weekly. In order to provide medical supervision for these centres it was further decided to increase by one the staff of assistant medical officers engaged on combined duties of school medical inspection and work under the Maternity and Child Welfare Act, and to allocate the equivalent of half of this officer's time to the latter duties. The above arrangements did not come into operation before the close of 1925. The following table affords information as to the addresses, times of meeting, and medical officers in charge of the existing 23 welfare centres.

Sanitary District.	Address of Welfare Centre.	Day and Time on which Centre is held.	Medical Officer in Charge.
Urban—		P.M.	
Feltham	The Hut, Council School ...	Tuesday ... 2.30 ...	Dr. Proctor.
Friern Barnet ...	Congregational Church Hall, Bellevue Road.	Wednesday 2.30 ...	Dr. Spreat.
	Freehold Social Institute, Hampden Road.	Friday ... 2.30 ...	Dr. Spreat.
Hampton Wick ...	Baptist Mission, Kingston Road	Friday ... 2.30 ...	Dr. Heddy.
Hayes	Wesleyan Chapel Schoolroom, Station Road.	Tuesday ... 2.30 ...	Dr. Shelley.
Ruislip-Northwood	Eastcote—Church Hall	Wednesday 2.30 ...	Dr. Hignett.
	Northwood—St. John's Presbyterian Church Hall, Hallowell Road.	Tuesday ... 2.30 ...	Dr. Hignett.
	Ruislip—Church Institute ...	Thursday ... 2.30 ...	Dr. Hignett.
Staines	Friends' Meeting House, High Street.	Wednesday 2.30 ...	Dr. Proctor.
Sunbury	139, Vicarage Road	Wednesday 2.30 ...	Dr. Heddy.
Yiewsley	Wesleyan Chapel School Room	Tuesday ... 2.30 ...	Dr. Norrington.

Rural—				
Hendon	Edgware—Whitchurch Institute, Whitchurch Lane.	Wednesday	2.30 ...	Dr. Burn.
	Harrow Weald—Memorial Hall	Thursday ...	2.30 ...	Dr. Burn.
	Headstone—St. George's Church Hall.	Tuesday ...	2.30 ...	Dr. Burn.
	Pinner—Free Church Lecture Hall, Payne's Lane.	Friday ...	3. 0 ...	Dr. Burn.
South Mimms ...	Potters Bar, Village Hall ...	Wednesday	2.30 ...	Dr. Daniel.
	South Mimms—St. Giles's Parish Room.	Thursday ...	2.30 ...	Dr. Daniel.
Staines	Ashford — Wesleyan Church School Room, Clarendon Road.	Thursday ...	2.30 ...	Dr. Proctor.
	Harlington—Village Hall, Cherry Lane.	Tuesday ...	2.30 ...	Dr. Moir.
	Shepperton Green — Council School.	Monday ...	2.30 ...	Dr. Proctor.
Uxbridge	Harefield—Memorial Hall ...	Thursday ...	2.30 ...	Dr. Norrington.
	Hillingdon—Salem School, High Road, Hayes End.	Thursday ...	2.30 ...	Dr. Shelley.
	Northolt—Church Hall	Thursday ...	2.30 ...	Dr. Moir.

No welfare centres are in operation in the districts of Greenford and Kingsbury. With regard to the former, the centre originally established in the district was discontinued in 1922, and the residents in Greenford now attend the Northolt Centre in Uxbridge Rural District. Residents in Kingsbury attend the County Council's Centre at Edgware in Hendon Rural District, with the exception of those resident in the south-east portion of the district. The Hendon Urban District Council have agreed to allow the latter to attend the District Council's Welfare Centre at West Hendon, which is conveniently situated for the purpose, and the County Council contribute towards the cost of the Centre.

The centres meet weekly, in three instances a medical officer attends alternate weeks, but in all others a doctor is in attendance weekly. At all sessions one (or more) of the Council's staff of nurses engaged on combined duties as health visitors and school nurses is present. Mothers attend the centres with their babies and children under five years of age, and are given appropriate advice by the medical officers in the bringing up of their infants. The babies are weighed at each attendance, any evidence of deviation from normal progress in development is noted, and steps are taken to ascertain and remove the cause, if this be possible. Voluntary workers render valuable aid at the meetings of the centres, and representative Local Welfare Committees assist in keeping the activities of the centres in touch with local needs. All the doctors in attendance at the centres are members of the Council's staff of seven whole-time officers engaged on work in connection with maternity and child welfare and school medical inspection and treatment, with the exception of the medical officers at the welfare centres in Friern Barnet and Ruislip-Northwood. By arrangement the local Medical Officers of Health of these two districts, who were in attendance at the centres at the time these were transferred from the control of the District Councils to the County Council, continue to attend the centres, and for this purpose act as part-time medical officers of the County Council.

Tea is served to mothers attending the centres, dried milk, virol, &c., are sold at cost price or provided at a reduced price or free of charge in cases of necessity; educational talks are given by the medical officers when practicable, and every effort is made to ensure that the Council's welfare centres fulfil their function as active agents for the improvement of the health and physique of infants and young children.

Information as to the actual amounts of dried milk, virol, &c., issued from the welfare centres during the calendar year 1925 is not available, as all accounts, &c., are balanced at the close of the financial year. The following, however, shows the amount and cost of various articles supplied at cost price, on part payment or free of charge during the financial year ended 31st March, 1926 :—

1925–26.	Amount.	Cost price.	Contributed by Mothers.	Charge on Scheme.
	lbs.	£ *s.* *d.*	£ *s.* *d.*	£ *s.* *d.*
Dried milk	13,000	906 8 8	562 11 4	343 17 4
Virol or similar substances	3,960	228 12 11	206 18 11	21 14 0
Cod liver oil, malt, &c.	2,167¾	69 1 8	41 19 4	27 2 4
Fresh milk	—	669 6 4	11 6 8	657 19 8
Total	—	1,873 9 7	822 16 3	1,050 13 4

The net charge on the County Council shows an increase of £208 0*s.* 3*d.* on the net charge for the financial year 1924–25, and is higher than on any occasion since 1920. Comparative figures for six years are as follows :—

	1920–1.	1921–2.	1922–3.	1923–4.	1924–5.	1925–6.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Cost price of Articles	3,028 17 6	2,228 14 0	1,455 12 8	1,579 9 3	1,709 19 5	1,873 9 7
Charge on Scheme	1,708 13 4	788 7 4	624 12 0	646 19 3	842 13 1	1,050 13 4

Ophthalmic Treatment.—Skilled ophthalmic treatment provided by the Education Committee for school children also is available for cases referred from welfare centres, but the necessity for this has not proved great.

Dental Treatment.—A joint scheme for the dental treatment of expectant and nursing mothers and children under five years of age, to be carried out by the Council's staff of dentists and dental nurses engaged on school dental treatment, was approved by the Council in 1920, and was in operation for a short time in 1921. Consequent on the resignation of one of the dental officers, and the urgent need for curtailment of expenditure, dental treatment for mothers and children, temporarily, was discontinued. In 1924, the Council decided to reinstate the joint scheme, and filled the vacancies in the dental staff. In consequence, treatment for expectant and nursing mothers, and children under five years of age, was available from the commencement of 1925. The staff engaged on the joint scheme consists of one senior dental officer, four dental officers, and five dental nurses, and the following is a statement of the work carried out in 1925.

Maternity and Child Welfare, Dental Treatment, 1925.

Dental Officer and Dental Clinic.	Numbers of mothers inspected.	Number of attendances made by mothers.	Number actually treated.	Extractions.		Number of dentures completed.	Other treatment.
				Under L.A.	Under gas.		
Miss Andrews, Stanley Road School, Teddington	20	79	13	43	73	9	153
Mr. S. J. Smith, Southall Dental Clinic	21	71	15	110	—	5	97
Mr. R. E. Cook, "Bramley House," The Butts, Brentford	13	62	6	114	26	9	Scaling
Mrs. C. S. Leiper, Holly Park School, Friern Barnet	16	186*	13	6	85	9	118
Mr. R. V. Kingham, Whitehall Council School, Uxbridge	29	119	22	121	21	16	56
Totals	99	517	69	394	205	48	424

* This includes infants.

Infants (under Five Years).

Miss Andrews....	15	18	15	25	—	—	38
Mr. S. J. Smith	—	—	—	—	—	—	—
Mr. R. E. Cook	1	1	1	3	—	—	—
Mrs. C. S. Leiper	34	(*See above*)	34	1	48	—	171
Mr. R. V. Kingham	4	5	4	4	5	—	—
Totals	54	24	54	33	53	—	209
Grand Totals	153	541	123	427	258	48	633

Mothers are expected to pay for, or contribute towards, the cost of any dental treatment which is provided, and the following scale of charges has been authorized :—

Children under the age of five years—

1*s.* 6*d.* for complete treatment.

Expectant and nursing mothers—

Fillings, 2*s.* 6*d.* for each tooth.
Extractions, 2*s.* 6*d.* for each tooth ; maximum charge, 15*s.*
Scaling, 5*s.*
Taking impression and fitting dentures, 5*s.*
Dentures, cost price to Council.

The procedure in force is as follows :—Suitable cases are referred to the appropriate dentist by the medical officers in charge of welfare centres. An applicant is examined by the dentist, and the latter forwards to the welfare centre a provisional estimate of the cost of the treatment which is considered necessary. The applicant visits the welfare centre, and if she is prepared to pay the estimated cost signs an undertaking to this effect. If she claims she is unable to pay the full cost she is provided with a form of financial enquiry, which she and her husband complete, sign and return to the welfare centre. The local welfare committee or its chairman decide what amount she may reasonably be asked to pay. Each case is considered on its merits, and no definite scale of income is applied to the family circumstances in arriving at the contribution the applicant must undertake to pay, although the scale of income authorized in connection with the issue of milk, &c., below cost price, frequently is used as a general guide. When the applicant's signature to an undertaking to pay has been obtained the dentist is informed and asked to proceed with the necessary treatment.

Except in cases of great necessity, each applicant is required to pay an initial fee of 2*s.* 6*d.* before any dental treatment is undertaken.

On the completion of any necessary extractions and fillings, a " denture card " is supplied to the patient from

the local welfare centre, and all payments made are recorded on this card. The patient is required to pay, either by instalments or in one sum, at least half the total amount she has undertaken to contribute before any steps are taken by the dentist in the nature of taking an impression of the mouth, &c., with a view to providing a suitable denture.

The finished artificial dentures are handed to the patient by the dentist in exchange for the denture card when this shows that the total amount promised has been paid. All cases of hardship are reviewed by the local committee or its chairman.

During the financial year ended 31st March, 1926, the cost of dentures supplied by the County Council was £47 2*s.* 3*d.*, and the dental charges contributed by mothers and children attending the welfare centres amounted to £64 3*s.* 8*d.* This latter figure includes fees for treatment other than the provision of dentures.

Central Ante-Natal Clinic.—In last year's Report account was given of a decision to establish at the Guildhall, Westminster, a central ante-natal clinic, under the care of J. S. Fairbairn, Esq., F.R.C.S., F.R.C.P., Senior Obstetrical Physician and Lecturer on Midwifery and Diseases of Women at St. Thomas's Hospital. The Council's assistant medical officers in charge of welfare centres, which also serve the purpose of local ante-natal clinics, refer cases requiring a specialist's opinion to the Central Clinic, and themselves accompany the cases so as to receive directions as to their further care.

Up to the end of 1925 two sessions were held, three women attending on the first occasion and six on the second. All were cases presenting some abnormality of pregnancy. Each woman was examined by Dr. Fairbairn, who afterwards conferred with the assistant medical officer concerned and discussed any points of difficulty arising out of the patient's condition, gave advice to the women, instructed the midwife who had been engaged for the confinement, if present, as to suitable measures for the care of the patient during the remainder of pregnancy and the appropriate management of labour, and, in cases where a doctor had

been engaged for the confinement, wrote to him giving the result of his examination. One woman was referred to one of the special departments of St. Thomas's Hospital for further investigation, and two pathological specimens were submitted to the Clinical Research Association for bacteriological examination.

In connection with the clinic, arrangements have been made with St. Thomas's Hospital, on terms favourable to the County Council, for the making of X-ray examinations, and, if necessary, the reception into the hospital of cases from the Council's area found to require treatment or observation in an institution, but no occasion for utilising these arrangements occurred before the close of the year.

The development of facilities for highly skilled ante-natal advice and treatment marks the most important advance in the provisions for the care of mothers and infants which has been made since the inception of the Scheme for Maternity and Child Welfare. In order that the benefit of the arrangements should be known to all doctors and midwives practising in the 14 districts under the charge of the County Council for purposes of maternity and child welfare, the following letter was circulated early in 1926 :—

DEAR SIR/MADAM,

The Middlesex County Council, as the authority for the administration of the Maternity and Child Welfare Act, 1918, in certain areas of the County of Middlesex, has established a Central Ante-natal Clinic for consultation purposes, the services of which are available free of charge to any expectant mother residing *in any of the districts shown on the appended list.*

Your attention is directed to this scheme, which is now in operation, and by means of which medical practitioners or midwives may obtain the opinion of a consulting obstetrician upon any matters of doubt or difficulty occurring in ante-natal cases met with in the course of their private practices.

A session is held once a month at the Middlesex Guildhall, Westminster, where Dr. John S. Fairbairn, F.R.C.S., F.R.C.P., Obstetric Physician to St. Thomas's Hospital, examines each case attending ; and his findings and opinions are communicated to the doctor or midwife who has been engaged to attend at the confinement.

Medical practitioners or midwives wishing to avail themselves of these facilities should refer cases in the first instance to the *local* Maternity and Child Welfare Centre (*see* appended

list), where an appointment for the patient to attend the Central Ante-natal Clinic will be made. Further attendance of a patient at the *local* Maternity and Child Welfare Centre will not be expected unless the patient and private doctor or midwife so desire. The date and time of attendance at the Central Ante-natal Clinic will be notified to the doctor or midwife concerned, in order that he or she may have the opportunity of being present at Dr. Fairbairn's examination. In the event of this proving inconvenient or impracticable, a short note of the reason for desiring a specialist's opinion on the case should be addressed to me at this office.

If a patient is suffering from albuminuria this fact should be notified to the *local* Welfare Centre at the time the patient visits to ask for an appointment, in order that arrangements may be made for the "Urea Concentration Test" to be carried out before the date of examination by Dr. Fairbairn.

Arrangements also have been made by the County Council for the admission of cases of especial difficulty to the wards of St. Thomas's Hospital for observation and further examination by Dr. Fairbairn, if he considers this course advisable.

The use of the clinic is intended, primarily, for cases not in a position to pay for private consultation with an obstetrical or gynæcological specialist, but presenting unusual symptoms during pregnancy or in which difficult labour may be anticipated. The importance of ante-natal care and the value of the early recognition of abnormalities, as factors in the reduction of maternal mortality and morbidity, are becoming increasingly apparent, and it is hoped that every advantage will be taken of the facilities provided by the County Council.

J. TATE,
County Medical Officer.

Provision of Midwives.—In order to provide for areas in which the existing facilities for attendance on women during their confinements were inadequate, the Council appointed three whole-time midwives, who work in Greenford, Yiewsley, Ruislip-Northwood, and adjoining neighbourhoods.

During 1925, the Council's whole-time officers attended 144 cases, either in their capacity as midwives, or as maternity nurses to cases under the care of doctors. During the financial year ended 31st March, 1925, the County Council, with the approval of the Ministry of Health, made a grant of £25 to the Harmondsworth Nursing Association in respect of midwifery services in the parish of Harmondsworth.

Maternity Homes.—Under arrangement with the Harrow, Wealdstone and District War Memorial Maternity Hostel, two cases were admitted from the Council's area during 1925, the same number as in 1924.

The question of the need for the provision by the County Council of lying-in homes for women residing in that portion of the County for which the Council is responsible for maternity and child welfare work, whose domestic conditions render it undesirable for confinement to take place in the homes, has engaged the attention of the Council on many occasions. In 1920, a decision to establish several small homes throughout the area was arrived at, and a scheme framed on these lines was approved by the Ministry of Health, but the need for economy resulted in the Ministry of Health requesting the Council not to proceed with the scheme.

Since the economy restrictions were removed by the Ministry so far as public health measures are concerned, the subject has received careful reconsideration. Enquiry was made through the health visitors as to the number of homes in each nurse's district from which births had been notified during a period of six months, but in which the home conditions were such that the mothers should not have remained at home for their confinements. Especially was the question of overcrowding considered in this connection.

Based upon this enquiry, it was deduced that between 100–200 births each year occur amongst families in the area living under unsuitable or undesirable conditions. In about 10 per cent. of these cases the women leave home for their confinements. Doubtless many of the remaining women concerned would refuse to leave their homes if suitable accommodation were available; nevertheless, there is indication that some provision for normal lying-in cases would be of value. Assuming that each case remained in a lying-in home for two weeks, it follows that eight beds would accommodate 208 patients annually, not allowing for overlapping of cases, delay in convalescence, &c. On the other hand the Council's area is very wide in extent, covering an area equal to half the total size of the Administrative County, and embracing districts as far apart as

South Mimms, Harefield and Staines, with the result that wherever an institution was established it would only serve a small proportion of the cases for which such accommodation is desirable. From this it follows that, although a total of eight beds should meet the requirements of the cases found in unsuitable homes, the extensive size of the area would necessitate the establishment of three or more separate institutions.

Experience has shown that the cost of maintenance of small lying-in homes established by local authorities is excessively high, and Sir George Newman, Chief Medical Officer of the Ministry of Health, in his Annual Report for 1923, expressed the opinion that such homes should have not less than 12 to 20 beds, and probably more. This is eminently sound, and both on grounds of economy and efficiency, a substantial increase on the total of 20 beds in each home is desirable.

It is not possible to forecast what policy Parliament ultimately may approve with regard to the reform of the Poor Law, but until this is settled the Council have decided to refrain from the expense entailed by the establishment of small institutions, which are unlikely to prove satisfactory on financial or medical grounds, and are almost incapable of future expansion or development.

Meanwhile, if possible, arrangements will be made, as occasion arises, with neighbouring authorities who have made institutional provision for lying-in cases, for the utilisation by the County Council of one or two beds at their institutions.

Crippled Children.—In 1924 detailed enquiry was made into the numbers of children of, and below, school age in the 24 districts in which the County Council is responsible for elementary education. These 24 districts include the 14 for which the County Council is responsible for maternity and child welfare work. The result of this enquiry showed that the existing facilities for orthopædic treatment of infants and children resident in the area were adequate to meet the needs. It may be stated that with regard to children under five years of age, no case was found which either had not received sufficient and adequate

treatment, or was not, at the time of the enquiry, receiving such treatment.

Three factors in particular contribute towards this favourable state of affairs, namely :—

(i) The Middlesex County Council's scheme for the treatment of tuberculosis is comprehensive in character, and includes the treatment of all cases of surgical tuberculosis, whether occurring in adults or children.

(ii) The London hospitals are accessible from all parts of the County.

(iii) Rickets is a disease infrequently met with in Middlesex.

Out of 194 crippled children noted in the whole elementary education area, defect was due to rickets in only 12 instances, and of these 9 were children over five years of age. The three children under school age who presented evidence of rickets were receiving suitable treatment.

Ophthalmia Neonatorum.—Five cases of this disease were notified in the maternity and child welfare area of the County during 1925. Of these five cases two were treated at home, and no injury to vision resulted. The remaining three were patients under the care of private doctors, and no information was able to be obtained with regard to them.

Maternal Deaths, Still-births and Infant Deaths have been dealt with fully earlier in this Report.

Co-operation with other authorities.—In the case of the area which is administered for Poor Law purposes by the Uxbridge Guardians, working arrangements are in existence whereby notification is sent to the County Council by the Guardians, of infants received by persons residing in the area, under the provisions of the Children Act, 1908 (Part I). The homes where such children live are visited regularly by the County Council's health visitors, and in the event of any condition arising which calls for action,

information is forwarded to the Guardians. The majority of the children attend regularly at the County Council's welfare centres.

In 1925, the County Council delegated the powers and duties of the Council under Sections 6 and 41 of the Widows, Orphans and Old Age Contributory Pensions Act, 1925, to the Maternity and Child Welfare Committee, and in view of the fact that the County Council's staff of assistant medical officers and health visitors, engaged in combined duties of medical inspection and treatment of school children and work under the Maternity and Child Welfare Act, is controlled by the Maternity and Child Welfare Committee, the Education Committee requested that any work arising under the foregoing sections of the above Act, with regard to children of school age, should be carried out by the former Committee. By this decision overlapping will be prevented, and full co-ordination obtained. The provisions of the Act did not come into operation until 1926.

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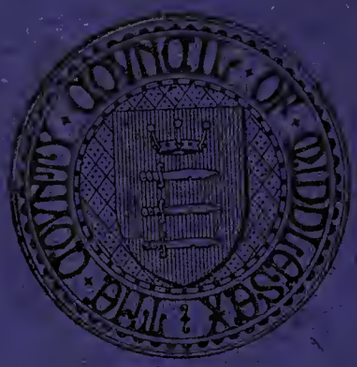
PRINTERS IN ORDINARY TO HIS MAJESTY,
44-47, ST. MARTIN'S LANE, W.C. 2.



Administrative County of Middlesex.

ANNUAL REPORT

OF THE

COUNTY MEDICAL OFFICER OF HEALTH

FOR THE

YEAR 1925.

LONDON:
HARRISON AND SONS, LTD., ST. MARTIN'S LANE, W.C. 2,
Printers in Ordinary to His Majesty.

1926.

[No. 699]